COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit No. **VA0092771**
Effective Date: **TBD 2016**
Expiration Date: **TBD 2021**

AUTHORIZATION TO DISCHARGE UNDER THE
VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM
AND THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act as amended and pursuant to the State Water Control Law and regulations adopted pursuant thereto, the following owner is authorized to discharge in accordance with the information submitted with the permit application, and with this permit cover page, Part I – Effluent Limitations and Monitoring Requirements, and Part II – Conditions Applicable To All VPDES Permits, and Part III – Industrial Stormwater Management as set forth herein.

Owner Name: United States Department of the Army
Facility Name: U.S. Army Garrison – Fort Belvoir
County: Fairfax
Facility Location: U.S. Route 1, Fort Belvoir, VA 22060

The owner is authorized to discharge to the following receiving streams:

Stream Name:	Accotink Bay, UT; Accotink Creek, UT; Dogue Creek, UT Gunston Cove, UT; Mason Run; Mason Run, UT	Dogue Creek; Gunston Cove
River Basin:	Potomac River	Potomac River
River Subbasin:	Potomac River	Potomac River
Section:	7	6
Class:	III	II
Special Standards:	b (Not Applicable)	b, y (Not Applicable)

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Thomas A. Faha
Director, Northern Regional Office

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Date

A. Stormwater Monitoring Requirements

1. Outfall 001 – Davison Army Airfield North

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. During the period beginning with the permit's effective date and lasting until the expiration date the permittee is authorized to discharge from Outfall Number 001. Such discharges shall be monitored by the permittee as specified below.

c. Outfall 001 is substantially identical to Outfall 4942. Discharge data from Outfall 001 may be submitted to represent this outfall.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[(1)]	Daily Maximum[(1)]	Minimum	Maximum[(1)]	Frequency	Sample Type
Flow (MGD)[(2)]	NL	NL	NA	NA	1/6M	Estimate
pH[(7)]	NA	NA	NL (S.U.)	NL (S.U.)	1/6M	Grab
Total Suspended Solids (TSS)[(7,8)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Petroleum Hydrocarbons (TPH)[(3,7,8)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Nitrogen[(1,4)]	NA	NA	NA	NL (mg/L)	1/6M	Calculated
Total Kjeldahl Nitrogen (TKN)[(5,8)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Nitrate+Nitrite (NO_2+NO_3)[(5)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Phosphorus[(1,5)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Copper, Dissolved[(6,7,8)]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Hardness, Total (as $CaCO_3$)[(6)]	NA	NA	NA	NL (mg/L)	1/6M	Grab

(1) See Part I.B.

(2) The average flow is variable.

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
1/6M = Once every six months.

(3) Total Petroleum Hydrocarbons (TPH) is the sum of individual gasoline range organics and diesel range organics or TPH-GRO and TPH-DRO to be measured by EPA SW 846 Method 8015 for gasoline and diesel range organics, or by EPA SW 846 Methods 8260 Extended and 8270 Extended.

(4) Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests during each of the first four semi-annual monitoring periods.

(5) Samples shall be collected during each of the first four semi-annual monitoring periods.

(6) Samples for metals and hardness shall be collected concurrently.

(7) The following benchmark concentrations are applicable: pH (Minimum) – 6.0 S.U.; pH (Maximum) – 9.0 S.U.; TSS – 100 mg/L; TPH – 15 mg/L; Dissolved Copper – 14 ug/L.

(8) The following Quantification Levels (QLs) are applicable: TSS – 1.0 mg/L; TPH – 0.5 mg/L; TKN – 0.50 mg/L; Copper – 2.8 µg/L.

1/6M = The semi-annual monitoring periods shall be January 1 – June 30 and July 1 – December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 10 and January 10, respectively).

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

A. Stormwater Monitoring Requirements

2. Outfall 002 – Davison Army Airfield East

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. During the period beginning with the permit's effective date and lasting until the expiration date the permittee is authorized to discharge from Outfall Number 002. Such discharges shall be monitored by the permittee as specified below.

c. Outfall 002 is substantially identical to Outfalls 4715, 4842, 4843, 4844, 4847, 4852, 4868, 4870, 4910, 4911, 4928, 4940, 4948, 4954, 4956, and 4958. Discharge data from Outfall 002 may be submitted to represent these outfalls.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[1]	Daily Maximum[1]	Minimum	Maximum[1]	Frequency	Sample Type
Flow (MGD)[2]	NL	NL	NA	NA	1/6M	Estimate
pH[6]	NA	NA	NL (S.U.)	NL (S.U.)	1/6M	Grab
Total Suspended Solids (TSS)[6,7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Petroleum Hydrocarbons (TPH)[3,6,7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Nitrogen[1,4]	NA	NA	NA	NL (mg/L)	1/6M	Calculated
Total Kjeldahl Nitrogen (TKN)[5,7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Nitrate+Nitrite (NO_2+NO_3)[5]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Phosphorus[1,5]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Propylene Glycol[8]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Specific Conductance[8]	NA	NA	NA	NL (µmhos/cm)	1/6M	Grab
Dissolved Oxygen (D.O.)[8]	NA	NA	NA	NL (mg/L)	1/6M	Grab

[1] See Part I.B.

[2] The average flow is variable.

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
1/6M = Once every six months.

[3] Total Petroleum Hydrocarbons (TPH) is the sum of individual gasoline range organics and diesel range organics or TPH-GRO and TPH-DRO to be measured by EPA SW 846 Method 8015 for gasoline and diesel range organics, or by EPA SW 846 Methods 8260 Extended and 8270 Extended.

[4] Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests during each of the first four semi-annual monitoring periods.

[5] Samples shall be collected during each of the first four semi-annual monitoring periods.

[6] The following benchmark concentrations are applicable: pH (Minimum) – 6.0 S.U.; pH (Maximum) – 9.0 S.U.; TSS – 100 mg/L; TPH – 15 mg/L.

[7] The following Quantification Levels (QLs) are applicable: TSS – 1.0 mg/L; TPH – 0.5 mg/L; TKN – 0.50 mg/L.

[8] Samples for propylene glycol, specific conductance, and dissolved oxygen shall be collected during the months of October – April within the semi-annual monitoring period (January 1 – June 30 and July 1 – December 31) when a runoff event occurs and deicing activities have taken place.

1/6M = The semi-annual monitoring periods shall be January 1 – June 30 and July 1 – December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 10 and January 10, respectively).

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

A. Stormwater Monitoring Requirements

3. Outfall 003 – Davison Army Airfield South

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. During the period beginning with the permit's effective date and lasting until the expiration date the permittee is authorized to discharge from Outfall Number 003. Such discharges shall be monitored by the permittee as specified below.

c. Outfall 003 is substantially identical to Outfalls 4668, 4669, 4670, 4671, 4696, and 4706. Discharge data from Outfall 003 may be submitted to represent these outfalls.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[(1)]	Daily Maximum[(1)]	Minimum	Maximum[(1)]	Frequency	Sample Type
Flow (MGD)[(2)]	NL	NL	NA	NA	1/6M	Estimate
pH[(6)]	NA	NA	NL (S.U.)	NL (S.U.)	1/6M	Grab
Total Suspended Solids (TSS)[(6,7)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Petroleum Hydrocarbons (TPH)[(3,6,7)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Nitrogen[(1,4)]	NA	NA	NA	NL (mg/L)	1/6M	Calculated
Total Kjeldahl Nitrogen (TKN)[(5,7)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Nitrate+Nitrite (NO_2+NO_3)[(5)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Phosphorus[(1,5)]	NA	NA	NA	NL (mg/L)	1/6M	Grab

(1) See Part I.B.

(2) The average flow is variable.

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
1/6M = Once every six months.

(3) Total Petroleum Hydrocarbons (TPH) is the sum of individual gasoline range organics and diesel range organics or TPH-GRO and TPH-DRO to be measured by EPA SW 846 Method 8015 for gasoline and diesel range organics, or by EPA SW 846 Methods 8260 Extended and 8270 Extended.

(4) Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests during each of the first four semi-annual monitoring periods.

(5) Samples shall be collected during each of the first four semi-annual monitoring periods.

(6) The following benchmark concentrations are applicable: pH (Minimum) – 6.0 S.U.; pH (Maximum) – 9.0 S.U.; TSS – 100 mg/L; TPH – 15 mg/L.

(7) The following Quantification Levels (QLs) are applicable: TSS – 1.0 mg/L; TPH – 0.5 mg/L; TKN – 0.50 mg/L.

1/6M = The semi-annual monitoring periods shall be January 1 – June 30 and July 1 – December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 10 and January 10, respectively).

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

A. Stormwater Monitoring Requirements

4. Outfall 004 – Belvoir Training Area

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. During the period beginning with the permit's effective date and lasting until the expiration date the permittee is authorized to discharge from Outfall Number 004. Such discharges shall be monitored by the permittee as specified below.

c. Outfall 004 is substantially identical to Outfalls 3302, 3992, 3993, 4430, 4432, 4434, 4435, 4442, 4444, 4446, 4450, and 4452. Discharge data from Outfall 004 may be submitted to represent these outfalls.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[(1)]	Daily Maximum[(1)]	Minimum	Maximum[(1)]	Frequency	Sample Type
Flow (MGD)[(2)]	NL	NL	NA	NA	1/6M	Estimate
pH[(6)]	NA	NA	NL (S.U.)	NL (S.U.)	1/6M	Grab
Total Suspended Solids (TSS)[(6,7)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Nitrogen[(1,3)]	NA	NA	NA	NL (mg/L)	1/6M	Calculated
Total Kjeldahl Nitrogen (TKN)[(4,7)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Nitrate+Nitrite (NO_2+NO_3)[(4)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Phosphorus[(1,4)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Lead, Dissolved[(5,7)]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Hardness, Total (as $CaCO_3$)[(5)]	NA	NA	NA	NL (mg/L)	1/6M	Grab

(1) See Part I.B.

(2) The average flow is variable.

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
1/6M = Once every six months.

(3) Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests during each of the first four semi-annual monitoring periods.

(4) Samples shall be collected during each of the first four semi-annual monitoring periods.

(5) Samples for metals and hardness shall be collected concurrently.

(6) The following benchmark concentrations are applicable: pH (Minimum) – 6.0 S.U.; pH (Maximum) – 9.0 S.U.; TSS – 100 mg/L.

(7) The following Quantification Levels (QLs) are applicable: TSS – 1.0 mg/L; TKN – 0.50 mg/L; Lead – 0.5 µg/L.

1/6M = The semi-annual monitoring periods shall be January 1 – June 30 and July 1 – December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 10 and January 10, respectively).

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

A. Stormwater Monitoring Requirements

5. Outfall 005 –HazWaste Facility (<90 day)

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. During the period beginning with the permit's effective date and lasting until the expiration date the permittee is authorized to discharge from Outfall Number 005. Such discharges shall be monitored by the permittee as specified below.

c. Outfall 005 is substantially identical to Outfall 2759. Discharge data from Outfall 005 may be submitted to represent this outfall.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[1]	Daily Maximum[1]	Minimum	Maximum[1]	Frequency	Sample Type
Flow (MGD)[2]	NL	NL	NA	NA	1/6M	Estimate
pH[7]	NA	NA	NL (S.U.)	NL (S.U.)	1/6M	Grab
Total Suspended Solids (TSS)[7,8]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Organic Carbon (TOC)[7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Nitrogen[1,4]	NA	NA	NA	NL (mg/L)	1/6M	Calculated
Total Kjeldahl Nitrogen (TKN)[8]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Nitrate+Nitrite (NO_2+NO_3)[5]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Phosphorus[1,5]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Arsenic, Total Recoverable[6,7,8]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Cadmium, Total Recoverable[6,7,8]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Chromium, Dissolved[6,8]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Copper, Dissolved[6,8]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Lead, Dissolved[6,7,8]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Lead, Total Recoverable[6,7,8]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Magnesium, Total Recoverable[6,7,8]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Mercury, Total Recoverable[6,7,8]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Nickel, Dissolved[6,7,8]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Selenium, Total Recoverable[6,7,8]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Silver, Total Recoverable[6,7,8]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Hardness, Total (as $CaCO_3$)[6]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Cyanide, Total[7]	NA	NA	NA	NL (µg/L)	1/6M	Grab

[1] See Part I.B.

[2] The average flow is variable.

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
1/6M = Once every six months.

[3] Total Petroleum Hydrocarbons (TPH) is the sum of individual gasoline range organics and diesel range organics or TPH-GRO and TPH-DRO to be measured by EPA SW 846 Method 8015 for gasoline and diesel range organics, or by EPA SW 846 Methods 8260 Extended and 8270 Extended.

[4] Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests during each of the first four semi-annual monitoring periods.

[5] Samples shall be collected during each of the first four semi-annual monitoring periods.

[6] Samples for metals and hardness shall be collected concurrently.

[7] The following benchmark concentrations are applicable: pH (Minimum) – 6.0 S.U.; pH (Maximum) – 9.0 S.U.; TSS – 100 mg/L; TKN – 1.5 mg/L; TOC – 110 mg/L; Total Recoverable Arsenic – 50 µg/L; Total Recoverable Cadmium – 2.1 µg/L; Dissolved Copper – 14 µg/L; Dissolved Lead – 16 µg/L; Total Recoverable Lead – 120 µg/L; Total Recoverable Magnesium – 64 µg/L; Total Recoverable Mercury – 1.4 µg/L; Dissolved Nickel – 32 µg/L; Total Recoverable Selenium – 5.0 µg/L; Total Recoverable Silver – 3.8 µg/L; Total Cyanide – 22 µg/L.

[8] The following Quantification Levels (QLs) are applicable: TSS – 1.0 mg/L; TKN – 0.50 mg/L; Arsenic - 90 µg/L; Cadmium – 0.39 µg/L; Copper – 2.8 µg/L; Lead – 3.4 µg/L; Mercury – 1.0 µg/L; Nickel – 6.8 µg/L; Selenium – 3.0 µg/L; Silver – 0.42 µg/L.

1/6M = The semi-annual monitoring periods shall be January 1 – June 30 and July 1 – December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 10 and January 10, respectively).

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

A. Stormwater Monitoring Requirements

6. Outfall 006 – National Guard Motor Pool

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. During the period beginning with the permit's effective date and lasting until the expiration date the permittee is authorized to discharge from Outfall Number 006. Such discharges shall be monitored by the permittee as specified below.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[1]	Daily Maximum[1]	Minimum	Maximum[1]	Frequency	Sample Type
Flow (MGD)[2]	NL	NL	NA	NA	1/6M	Estimate
pH[6]	NA	NA	NL (S.U.)	NL (S.U.)	1/6M	Grab
Total Suspended Solids (TSS)[6,7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Petroleum Hydrocarbons (TPH)[3,6,7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Nitrogen[1,4]	NA	NA	NA	NL (mg/L)	1/6M	Calculated
Total Kjeldahl Nitrogen (TKN)[5,7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Nitrate+Nitrite (NO_2+NO_3)[5]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Phosphorus[1,5]	NA	NA	NA	NL (mg/L)	1/6M	Grab

[1] See Part I.B.

[2] The average flow is variable.

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
1/6M = Once every six months.

[3] Total Petroleum Hydrocarbons (TPH) is the sum of individual gasoline range organics and diesel range organics or TPH-GRO and TPH-DRO to be measured by EPA SW 846 Method 8015 for gasoline and diesel range organics, or by EPA SW 846 Methods 8260 Extended and 8270 Extended.

[4] Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests each of the first four semi-annual monitoring periods.

[5] Samples shall be collected each of the first four semi-annual monitoring periods.

[6] The following benchmark concentrations are applicable: pH (Minimum) – 6.0 S.U.; pH (Maximum) – 9.0 S.U.; TSS – 100 mg/L; TPH – 15 mg/L.

[7] The following Quantification Levels (QLs) are applicable: TSS – 1.0 mg/L; TPH – 0.5 mg/L; TKN – 0.50 mg/L.

1/6M = The semi-annual monitoring periods shall be January 1 – June 30 and July 1 – December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 10 and January 10, respectively).

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

A. Stormwater Monitoring Requirements

7. Outfall 007 – 21st Waste Facility

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. During the period beginning with the permit's effective date and lasting until the expiration date the permittee is authorized to discharge from Outfall Number 007. Such discharges shall be monitored by the permittee as specified below.

c. Outfall 007 is substantially identical to Outfalls 2823, 2829, and 2832. Discharge data from Outfall 007 may be submitted to represent these outfalls.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[(1)]	Daily Maximum[(1)]	Minimum	Maximum[(1)]	Frequency	Sample Type
Flow (MGD)[(2)]	NL	NL	NA	NA	1/6M	Estimate
pH[(6)]	NA	NA	NL (S.U.)	NL (S.U.)	1/6M	Grab
Total Suspended Solids (TSS)[(6,7)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Nitrogen[(1,3)]	NA	NA	NA	NL (mg/L)	1/6M	Calculated
Total Kjeldahl Nitrogen (TKN)[(4,7)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Nitrate+Nitrite (NO_2+NO_3)[(4)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Phosphorus[(1,4)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Copper, Dissolved[(5,6,7)]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Lead, Dissolved[(5,6,7)]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Nickel, Dissolved[(5,7)]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Hardness, Total (as $CaCO_3$)[(5)]	NA	NA	NA	NL (mg/L)	1/6M	Grab

(1) See Part I.B.

(2) The average flow is variable.

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
1/6M = Once every six months.

(3) Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests during each of the first four semi-annual monitoring periods.

(4) Samples shall be collected each of the first four semi-annual monitoring periods.

(5) Samples for metals and hardness shall be collected concurrently.

(6) The following benchmark concentrations are applicable: pH (Minimum) – 6.0 S.U.; pH (Maximum) – 9.0 S.U.; TSS – 100 mg/L; Dissolved Copper – 14 µg/L; Dissolved Lead – 16 µg/L.

(7) The following Quantification Levels (QLs) are applicable: TSS – 1.0 mg/L; TKN – 0.50 mg/L; Copper – 2.8 µg/L; Lead – 3.4 µg/L; Nickel – 6.8 µg/L.

1/6M = The semi-annual monitoring periods shall be January 1 – June 30 and July 1 – December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 10 and January 10, respectively).

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

A. Stormwater Monitoring Requirements

8. Outfall 008 – Aerospace Data Facility (NE)

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. During the period beginning with the permit's effective date and lasting until the expiration date the permittee is authorized to discharge from Outfall Number 008. Such discharges shall be monitored by the permittee as specified below.

c. Outfall 008 is substantially identical to Outfalls 5015, 5017, 5018, 5021, 5026, 5028, and 5038. Discharge data from Outfall 008 may be submitted to represent these outfalls.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[1]	Daily Maximum[1]	Minimum	Maximum[1]	Frequency	Sample Type
Flow (MGD)[2]	NL	NL	NA	NA	1/6M	Estimate
pH[8]	NA	NA	NL (S.U.)	NL (S.U.)	1/6M	Grab
Total Suspended Solids (TSS)[8,9]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Petroleum Hydrocarbons (TPH)[3,8,9]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Organic Carbon (TOC)[8]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Chloride[7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Dissolved Solids (TDS)[7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Specific Conductance[7]	NA	NA	NA	NL (µmhos/cm)	1/6M	Grab
Total Nitrogen[1,4]	NA	NA	NA	NL (mg/L)	1/6M	Calculated
Total Kjeldahl Nitrogen (TKN)[8,9]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Nitrate+Nitrite (NO_2+NO_3)[5]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Phosphorus[1,5]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Arsenic, Total Recoverable[6,8,9]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Cadmium, Total Recoverable[6,8,9]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Copper, Dissolved[6,8,9]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Lead, Total Recoverable[6,8,9]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Magnesium, Total Recoverable[6,8]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Mercury, Total Recoverable[6,8,9]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Nickel, Dissolved[6,8,9]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Selenium, Total Recoverable[6,8,9]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Silver, Total Recoverable[6,8,9]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Hardness, Total (as $CaCO_3$)[6]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Cyanide, Total[8]	NA	NA	NA	NL (µg/L)	1/6M	Grab

[1] See Part I.B.

[2] The average flow is variable.

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
1/6M = Once every six months.

[3] Total Petroleum Hydrocarbons (TPH) is the sum of individual gasoline range organics and diesel range organics or TPH-GRO and TPH-DRO to be measured by EPA SW 846 Method 8015 for gasoline and diesel range organics, or by EPA SW 846 Methods 8260 Extended and 8270 Extended.

[4] Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests during each of the first four semi-annual monitoring periods.

[5] Samples shall be collected during each of the first four semi-annual monitoring periods.

[6] Samples for metals and hardness shall be collected concurrently.

[7] Samples for chloride, total dissolved solids, and specific conductance shall be collected during the winter months associated with the semi-annual monitoring period (January 1 – June 30 and July 1 – December 31) when salt movements are occurring and/or salt is being applied.

[8] The following benchmark concentrations are applicable: pH (Minimum) – 6.0 S.U.; pH (Maximum) – 9.0 S.U.; TSS – 100 mg/L; TPH – 15 mg/L; TKN – 1.5 mg/L; TOC – 110 mg/L; Total Recoverable Arsenic – 50 µg/L; Total Recoverable Cadmium – 2.1 µg/L; Dissolved Copper – 14 µg/L; Total Recoverable Lead – 120 µg/L; Total Recoverable Magnesium – 64 µg/L; Total Recoverable Mercury – 1.4 µg/L; Total Recoverable Selenium – 5.0 µg/L; Total Recoverable Silver – 3.8 µg/L; Total Cyanide – 22 µg/L.

[9] The following Quantification Levels (QLs) are applicable: TSS – 1.0 mg/L; TPH – 0.5 mg/L; TKN – 0.50 mg/L; Arsenic - 90 µg/L; Cadmium – 0.39 µg/L; Copper – 2.8 µg/L; Lead – 3.4 µg/L; Mercury – 1.0 µg/L; Nickel – 0.5 µg/L; Selenium – 3.0 µg/L; Silver – 0.42 µg/L.

A. Stormwater Monitoring Requirements

8. Outfall 008 – Aerospace Data Facility (NE) Continued

1/6M = The semi-annual monitoring periods shall be January 1 – June 30 and July 1 – December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 1 and January 10, respectively).

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

A. Stormwater Monitoring Requirements

9. Outfall 009 – Swank-Snyder Golf Course

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. During the period beginning with the permit's effective date and lasting until the expiration date the permittee is authorized to discharge from Outfall Number 009. Such discharges shall be monitored by the permittee as specified below.

c. Outfall 009 is substantially identical to Outfalls 4040, 4042, 4044, 4050, 4052, 4054, 4300, 5318, 5320, 5321, 5594, 5596, 5597, 5726, 5729, 5767, 5768, 5779, 5782, 5784, 5788, and 5844. Discharge data from Outfall 009 may be submitted to represent these outfalls.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[(1)]	Daily Maximum[(1)]	Minimum	Maximum[(1)]	Frequency	Sample Type
Flow (MGD)[(2)]	NL	NL	NA	NA	1/6M	Estimate
pH[(7)]	NA	NA	NL (S.U.)	NL (S.U.)	1/6M	Grab
Total Suspended Solids (TSS)[(7,8)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Chloride[(6)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Dissolved Solids (TDS)[(6)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Specific Conductance[(6)]	NA	NA	NA	NL (µmhos/cm)	1/6M	Grab
Total Petroleum Hydrocarbons (TPH)[(3,7,8)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Nitrogen[(1,4)]	NA	NA	NA	NL (mg/L)	1/6M	Calculated
Total Kjeldahl Nitrogen (TKN)[(8)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Nitrate+Nitrite (NO_2+NO_3)	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Phosphorus[(1)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Copper, Dissolved[(5,7,8)]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Nickel, Dissolved[(5,7,8)]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Hardness, Total (as $CaCO_3$)[(5)]	NA	NA	NA	NL (mg/L)	1/6M	Grab

(1) See Part I.B.

(2) The average flow is variable.

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
1/6M = Once every six months.

(3) Total Petroleum Hydrocarbons (TPH) is the sum of individual gasoline range organics and diesel range organics or TPH-GRO and TPH-DRO to be measured by EPA SW 846 Method 8015 for gasoline and diesel range organics, or by EPA SW 846 Methods 8260 Extended and 8270 Extended.

(4) Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests.

(5) Samples for metals and hardness shall be collected concurrently.

(6) Samples for chloride, total dissolved solids, and specific conductance shall be collected during the winter months associated with the semi-annual monitoring period (January 1 – June 30 and July 1 – December 31) when salt movements are occurring and/or salt is being applied.

(7) The following benchmark concentrations are applicable: pH (Minimum) – 6.0 S.U.; pH (Maximum) – 9.0 S.U.; TSS – 100 mg/L; TPH – 15 mg/L; Dissolved Copper – 14 µg/L; Dissolved Nickel – 32 µg/L.

(8) The following Quantification Levels (QLs) are applicable: TSS – 1.0 mg/L; TPH – 0.5 mg/L; TKN – 0.50 mg/L; Copper – 2.8 µg/L; Nickel – 6.8 µg/L.

1/6M = The semi-annual monitoring periods shall be January 1 – June 30 and July 1 – December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 10 and January 10, respectively).

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

A. Stormwater Monitoring Requirements

10. Outfall 010 – 249th Prime Power Motor Pool (Meade Road)

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. During the period beginning with the permit's effective date and lasting until the outfall is removed due to construction or the expiration date, whichever comes first, the permittee is authorized to discharge from Outfall Number 010. Such discharges shall be monitored by the permittee as specified below.

c. Outfall 010 is substantially identical to Outfalls 3243, 3258, and 3260. Discharge data from Outfall 010 may be submitted to represent these outfalls.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[1]	Daily Maximum[1]	Minimum	Maximum[1]	Frequency	Sample Type
Flow (MGD)[2]	NL	NL	NA	NA	1/6M	Estimate
pH[6]	NA	NA	NL (S.U.)	NL (S.U.)	1/6M	Grab
Total Suspended Solids (TSS)[6,7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Petroleum Hydrocarbons (TPH)[3,6,7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Nitrogen[1,4]	NA	NA	NA	NL (mg/L)	1/6M	Calculated
Total Kjeldahl Nitrogen (TKN)[5,7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Nitrate+Nitrite (NO_2+NO_3)[5]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Phosphorus[1,5]	NA	NA	NA	NL (mg/L)	1/6M	Grab

[1] See Part I.B.

[2] The average flow is variable.

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
1/6M = Once every six months.

[3] Total Petroleum Hydrocarbons (TPH) is the sum of individual gasoline range organics and diesel range organics or TPH-GRO and TPH-DRO to be measured by EPA SW 846 Method 8015 for gasoline and diesel range organics, or by EPA SW 846 Methods 8260 Extended and 8270 Extended.

[4] Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests each of the first four semi-annual monitoring periods.

[5] Samples shall be collected each of the first four semi-annual monitoring periods.

[6] The following benchmark concentrations are applicable: pH (Minimum) – 6.0 S.U.; pH (Maximum) – 9.0 S.U.; TSS – 100 mg/L; TPH – 15 mg/L.

[7] The following Quantification Levels (QLs) are applicable: TSS – 1.0 mg/L; TPH – 0.5 mg/L; TKN – 0.50 mg/L.

1/6M = The semi-annual monitoring periods shall be January 1 – June 30 and July 1 – December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 10 and January 10, respectively).

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

A. Stormwater Monitoring Requirements

11. Outfall 011 – 12th Aviation Motor Pool / Washrack

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. During the period beginning with the permit's effective date and lasting until the expiration date the permittee is authorized to discharge from Outfall Number 011. Such discharges shall be monitored by the permittee as specified below.

c. Outfall 011 is substantially identical to Outfalls 3209, 3211, 3215, 3220, and 3222. Discharge data from Outfall 011 may be submitted to represent these outfalls.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[1]	Daily Maximum[1]	Minimum	Maximum[1]	Frequency	Sample Type
Flow (MGD)[2]	NL	NL	NA	NA	1/6M	Estimate
pH[6]	NA	NA	NL (S.U.)	NL (S.U.)	1/6M	Grab
Total Suspended Solids (TSS)[6,7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Petroleum Hydrocarbons (TPH)[3,6,7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Nitrogen[1,4]	NA	NA	NA	NL (mg/L)	1/6M	Calculated
Total Kjeldahl Nitrogen (TKN)[5,7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Nitrate+Nitrite (NO_2+NO_3)[5]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Phosphorus[1,5]	NA	NA	NA	NL (mg/L)	1/6M	Grab

[1] See Part I.B.

[2] The average flow is variable.

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
1/6M = Once every six months.

[3] Total Petroleum Hydrocarbons (TPH) is the sum of individual gasoline range organics and diesel range organics or TPH-GRO and TPH-DRO to be measured by EPA SW 846 Method 8015 for gasoline and diesel range organics, or by EPA SW 846 Methods 8260 Extended and 8270 Extended.

[4] Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests during each of the first four semi-annual monitoring periods.

[5] Samples shall be collected during each of the first four semi-annual monitoring periods.

[6] The following benchmark concentrations are applicable: pH (Minimum) – 6.0 S.U.; pH (Maximum) – 9.0 S.U.; TSS – 100 mg/L; TPH – 15 mg/L.

[7] The following Quantification Levels (QLs) are applicable: TSS – 1.0 mg/L; TPH – 0.5 mg/L; TKN – 0.50 mg/L.

1/6M = The semi-annual monitoring periods shall be January 1 – June 30 and July 1 – December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 10 and January 10, respectively).

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

A. Stormwater Monitoring Requirements

12. Outfall 012 – Mosby Center

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. During the period beginning with the permit's effective date and lasting until the expiration date the permittee is authorized to discharge from Outfall Number 012. Such discharges shall be monitored by the permittee as specified below.

c. Outfall 012 is substantially identical to Outfalls 5510, 5512, 5514, 5521, 5737, and 5740. Discharge data from Outfall 012 may be submitted to represent these outfalls.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[1]	Daily Maximum[1]	Minimum	Maximum[1]	Frequency	Sample Type
Flow (MGD)[2]	NL	NL	NA	NA	1/6M	Estimate
pH[7]	NA	NA	NL (S.U.)	NL (S.U.)	1/6M	Grab
Total Suspended Solids (TSS)[7,8]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Petroleum Hydrocarbons (TPH)[3,7,8]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Organic Carbon (TOC)[7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Nitrogen[1,4]	NA	NA	NA	NL (mg/L)	1/6M	Calculated
Total Kjeldahl Nitrogen (TKN)[7,8]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Nitrate+Nitrite (NO_2+NO_3)[5]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Phosphorus[1,5]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Arsenic, Total Recoverable[6,7,8]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Cadmium, Total Recoverable[6,7,8]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Chromium, Dissolved[6,8]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Copper, Dissolved[6,7,8]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Lead, Total Recoverable[6,7,8]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Magnesium, Total Recoverable[6,7]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Mercury, Total Recoverable[6,7,8]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Nickel, Dissolved[6,7,8]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Selenium, Total Recoverable[6,7,8]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Silver, Total Recoverable[6,7,8]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Hardness, Total (as $CaCO_3$)[6]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Cyanide, Total[7]	NA	NA	NA	NL (µg/L)	1/6M	Grab

[1] See Part I.B.

[2] The average flow is variable.

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
1/6M = Once every six months.

[3] Total Petroleum Hydrocarbons (TPH) is the sum of individual gasoline range organics and diesel range organics or TPH-GRO and TPH-DRO to be measured by EPA SW 846 Method 8015 for gasoline and diesel range organics, or by EPA SW 846 Methods 8260 Extended and 8270 Extended.

[4] Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests during each of the first four semi-annual monitoring periods.

[5] Samples shall be collected during each of the first four semi-annual monitoring periods.

[6] Samples for metals and hardness shall be collected concurrently.

[7] The following benchmark concentrations are applicable: pH (Minimum) – 6.0 S.U.; pH (Maximum) – 9.0 S.U.; TSS – 100 mg/L; TPH – 15 mg/L; TKN – 1.5 mg/L: TOC – 110 mg/L; Total Recoverable Arsenic – 50 µg/L; Total Recoverable Cadmium – 2.1 µg/L; Dissolved Copper – 14 µg/L; Total Recoverable Lead – 120 µg/L; Total Recoverable Magnesium – 64 µg/L; Total Recoverable Mercury – 1.4 µg/L; Total Recoverable Selenium – 5.0 µg/L; Total Recoverable Silver – 3.8 µg/L; Total Cyanide – 22 µg/L.

[8] The following Quantification Levels (QLs) are applicable: TSS – 1.0 mg/L; TPH – 0.5 mg/L; TKN – 0.50 mg/L; Arsenic - 90 µg/L; Cadmium – 0.39 µg/L; Chromium – 0.5 µg/L; Copper – 2.8 µg/L; Lead – 3.4 µg/L; Mercury – 1.0 µg/L; Nickel – 0.5 µg/L; Selenium – 3.0 µg/L; Silver – 0.42 µg/L.

1/6M = The semi-annual monitoring periods shall be January 1 – June 30 and July 1 – December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 10 and January 10, respectively).

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

A. Stormwater Monitoring Requirements

13. Outfall 013 – Arby's / Army and Air Force Exchange Station (AAFES)

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. During the period beginning with the permit's effective date and lasting until the expiration date the permittee is authorized to discharge from Outfall Number 013. Such discharges shall be monitored by the permittee as specified below.

c. Outfall 013 is substantially identical to Outfalls 3762, 3763, and 3771. Discharge data from Outfall 013 may be submitted to represent these outfalls.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[1]	Daily Maximum[1]	Minimum	Maximum[1]	Frequency	Sample Type
Flow (MGD)[2]	NL	NL	NA	NA	1/6M	Estimate
pH[7]	NA	NA	NL (S.U.)	NL (S.U.)	1/6M	Grab
Total Suspended Solids (TSS)[7,8]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Petroleum Hydrocarbons (TPH)[3,7,8]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Oil and Grease	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Nitrogen[1,4]	NA	NA	NA	NL (mg/L)	1/6M	Calculated
Total Kjeldahl Nitrogen (TKN)[5,8]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Nitrate+Nitrite (NO_2+NO_3)[5]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Phosphorus[1,5]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Chromium, Dissolved[6,8]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Copper, Dissolved[6,7,8]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Lead, Dissolved[6,8]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Nickel, Dissolved[6,8]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Hardness, Total (as $CaCO_3$)[6]	NA	NA	NA	NL (mg/L)	1/6M	Grab

[1] See Part I.B.

[2] The average flow is variable.

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
1/6M = Once every six months.

[3] Total Petroleum Hydrocarbons (TPH) is the sum of individual gasoline range organics and diesel range organics or TPH-GRO and TPH-DRO to be measured by EPA SW 846 Method 8015 for gasoline and diesel range organics, or by EPA SW 846 Methods 8260 Extended and 8270 Extended.

[4] Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests during each of the first four semi-annual monitoring periods.

[5] Samples shall be collected during each of the first four semi-annual monitoring periods.

[6] Samples for metals and hardness shall be collected concurrently.

[7] The following benchmark concentrations are applicable: pH (Minimum) – 6.0 S.U.; pH (Maximum) – 9.0 S.U.; TSS – 100 mg/L; TPH – 15 mg/L; Dissolved Copper – 14 µg/L.

[8] The following Quantification Levels (QLs) are applicable: TSS – 1.0 mg/L; TPH – 0.5 mg/L; TKN – 0.50 mg/L; Chromium – 0.5 µg/L; Copper – 2.8 µg/L; Lead – 0.5 µg/L; Nickel – 0.5 µg/L.

1/6M = The semi-annual monitoring periods shall be January 1 – June 30 and July 1 – December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 10 and January 10, respectively).

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

A. Stormwater Monitoring Requirements

14. Outfall 014 –Army and Air Force Exchange Station (AAFES)

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. During the period beginning with the permit's effective date and lasting until the expiration date the permittee is authorized to discharge from Outfall Number 014. Such discharges shall be monitored by the permittee as specified below.

c. Outfall 014 is substantially identical to Outfalls 3745, 3752, 3753, 3756, 3757, 3758, 3759, and 3773. Discharge data from Outfall 014 may be submitted to represent these outfalls.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[(1)]	Daily Maximum[(1)]	Minimum	Maximum[(1)]	Frequency	Sample Type
Flow (MGD)[(2)]	NL	NL	NA	NA	1/6M	Estimate
pH[(7)]	NA	NA	NL (S.U.)	NL (S.U.)	1/6M	Grab
Total Suspended Solids (TSS)[(7,8)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Petroleum Hydrocarbons (TPH)[(3,7,8)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Nitrogen[(1,4)]	NA	NA	NA	NL (mg/L)	1/6M	Calculated
Total Kjeldahl Nitrogen (TKN)[(5,8)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Nitrate+Nitrite (NO_2+NO_3)[(5)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Phosphorus[(1,5)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Chromium, Dissolved[(6,8)]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Copper, Dissolved[(6,7,8)]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Lead, Dissolved[(6,8)]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Nickel, Dissolved[(6,8)]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Hardness, Total (as $CaCO_3$)[(6)]	NA	NA	NA	NL (mg/L)	1/6M	Grab

(1) See Part I.B.

(2) The average flow is variable.

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
1/6M = Once every six months.

(3) Total Petroleum Hydrocarbons (TPH) is the sum of individual gasoline range organics and diesel range organics or TPH-GRO and TPH-DRO to be measured by EPA SW 846 Method 8015 for gasoline and diesel range organics, or by EPA SW 846 Methods 8260 Extended and 8270 Extended.

(4) Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests during each of the first four semi-annual monitoring periods.

(5) Samples shall be collected during each of the first four semi-annual monitoring periods.

(6) Samples for metals and hardness shall be collected concurrently.

(7) The following benchmark concentrations are applicable: pH (Minimum) – 6.0 S.U.; pH (Maximum) – 9.0 S.U.; TSS – 100 mg/L; TPH – 15 mg/L; Dissolved Copper – 14 µg/L.

(8) The following Quantification Levels (QLs) are applicable: TSS – 1.0 mg/L; TPH – 0.5 mg/L; TKN – 0.50 mg/L; Chromium – 0.5 µg/L; Copper – 2.8 µg/L; Lead – 0.5 µg/L; Nickel – 0.5 µg/L.

1/6M = The semi-annual monitoring periods shall be January 1 – June 30 and July 1 – December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 10 and January 10, respectively).

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

A. Stormwater Monitoring Requirements

15. Outfall 015 – 16th Street Storage Area (Base Operations)

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. During the period beginning with the permit's effective date and lasting until the expiration date the permittee is authorized to discharge from Outfall Number 015. Such discharges shall be monitored by the permittee as specified below.

c. Outfall 015 is substantially identical to Outfalls 1611, 1636, 1696, 2176, 2941, 5818, 5889, and 5892. Discharge data from Outfall 015 may be submitted to represent these outfalls.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[1]	Daily Maximum[1]	Minimum	Maximum[1]	Frequency	Sample Type
Flow (MGD)[2]	NL	NL	NA	NA	1/6M	Estimate
pH[8]	NA	NA	NL (S.U.)	NL (S.U.)	1/6M	Grab
Total Suspended Solids (TSS)[8,9]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Petroleum Hydrocarbons (TPH)[3,8,9]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Oil and Grease	NA	NA	NA	NL (mg/L)	1/6M	Grab
Chloride[7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Dissolved Solids (TDS)[7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Specific Conductance[7]	NA	NA	NA	NL (µmhos/cm)	1/6M	Grab
Total Nitrogen[1,4]	NA	NA	NA	NL (mg/L)	1/6M	Calculated
Total Kjeldahl Nitrogen (TKN)[5,9]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Nitrate+Nitrite (NO_2+NO_3)[5]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Phosphorus[1,5]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Chromium, Dissolved[6,8,9]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Copper, Dissolved[6,8,9]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Lead, Dissolved[6,8,9]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Hardness, Total (as $CaCO_3$)[6]	NA	NA	NA	NL (mg/L)	1/6M	Grab

[1] See Part I.B.

[2] The average flow is variable.

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
1/6M = Once every six months.

[3] Total Petroleum Hydrocarbons (TPH) is the sum of individual gasoline range organics and diesel range organics or TPH-GRO and TPH-DRO to be measured by EPA SW 846 Method 8015 for gasoline and diesel range organics, or by EPA SW 846 Methods 8260 Extended and 8270 Extended.

[4] Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests during each of the first four semi-annual monitoring periods.

[5] Samples shall be collected during each of the first four semi-annual monitoring periods.

[6] Samples for metals and hardness shall be collected concurrently.

[7] Samples for chloride, total dissolved solids, and specific conductance shall be collected during the winter months associated with the semi-annual monitoring period (January 1 – June 30 and July 1 – December 31) when salt movements are occurring and/or salt is being applied.

[8] The following benchmark concentrations are applicable: pH (Minimum) – 6.0 S.U.; pH (Maximum) – 9.0 S.U.; TSS – 100 mg/L; TPH – 15 mg/L; Dissolved Chromium – 28 µg/L; Dissolved Copper – 14 µg/L; Dissolved Lead – 16 µg/L.

[9] The following Quantification Levels (QLs) are applicable: TSS – 1.0 mg/L; TPH – 0.5 mg/L; TKN – 0.50 mg/L; Chromium – 6.4 µg/L; Copper – 2.8 µg/L; Lead – 0.5 µg/L.

1/6M = The semi-annual monitoring periods shall be January 1 – June 30 and July 1 – December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 10 and January 10, respectively).

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

A. Stormwater Monitoring Requirements

16. Outfall 016 – Dogue Creek Marina

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. During the period beginning with the permit's effective date and lasting until the expiration date the permittee is authorized to discharge from Outfall Number 016. Such discharges shall be monitored by the permittee as specified below.

c. Outfall 016 is substantially identical to Outfalls 4467, 4469, and 4474. Discharge data from Outfall 016 may be submitted to represent these outfalls.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[1]	Daily Maximum[1]	Minimum	Maximum[1]	Frequency	Sample Type
Flow (MGD)[2]	NL	NL	NA	NA	1/6M	Estimate
pH[6]	NA	NA	NL (S.U.)	NL (S.U.)	1/6M	Grab
Total Suspended Solids (TSS)[6,7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Nitrogen[1,3]	NA	NA	NA	NL (mg/L)	1/6M	Calculated
Total Kjeldahl Nitrogen (TKN)[4,7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Nitrate+Nitrite (NO_2+NO_3)[4]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Phosphorus[1,4]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Chromium, Dissolved[5,7]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Copper, Dissolved[5,6,7]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Copper, Total Recoverable[5,6,7]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Lead, Dissolved[5,6,7]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Nickel, Dissolved[5,7]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Zinc, Total Recoverable[5,6,7]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Hardness, Total (as $CaCO_3$)[5]	NA	NA	NA	NL (mg/L)	1/6M	Grab

[1] See Part I.B.

[2] The average flow is variable.

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
1/6M = Once every six months.

[3] Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests during each of the first four sei-annual monitoring periods.

[4] Samples shall be collected during each of the first four semi-annual monitoring periods.

[5] Samples for metals and hardness shall be collected concurrently.

[6] The following benchmark concentrations are applicable: pH (Minimum) – 6.0 S.U.; pH (Maximum) – 9.0 S.U.; TSS – 100 mg/L; Dissolved Copper – 28 µg/L; Total Recoverable Copper – 18 µg/L; Dissolved Lead – 13 µg/L; Total Recoverable Zinc – 120 µg/L.

[7] The following Quantification Levels (QLs) are applicable: TSS – 1.0 mg/L; TKN – 0.50 mg/L; Chromium – 0.5 µg/L; Copper – 2.9 µg/L; Lead – 6.7 µg/L; Nickel – 0.5 µg/L; Zinc – 29 µg/L.

1/6M = The semi-annual monitoring periods shall be January 1 – June 30 and July 1 – December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 10 and January 10, respectively).

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

A. Stormwater Monitoring Requirements

17. Outfall 017 – Building 1809 (Recycling Center and Compost Yard)

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. During the period beginning with the permit's effective date and lasting until the expiration date the permittee is authorized to discharge from Outfall Number 017. Such discharges shall be monitored by the permittee as specified below.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[1]	Daily Maximum[1]	Minimum	Maximum[1]	Frequency	Sample Type
Flow (MGD)[2]	NL	NL	NA	NA	1/6M	Estimate
pH[4]	NA	NA	NL (S.U.)	NL (S.U.)	1/6M	Grab
Total Suspended Solids (TSS)[4,5]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Biochemical Oxygen Demand (BOD_5)[4,5]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Chemical Oxygen Demand (COD)[4,5]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Ammonia, as N[4,5]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Nitrogen[1,3,4]	NA	NA	NA	NL (mg/L)	1/6M	Calculated
Total Kjeldahl Nitrogen (TKN)[5]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Nitrate+Nitrite (NO_2+NO_3)	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Phosphorus[1,4]	NA	NA	NA	NL (mg/L)	1/6M	Grab

[1] See Part I.B.

[2] The average flow is variable.

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
1/6M = Once every six months.

[3] Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests.

[4] The following benchmark concentrations are applicable: pH (Minimum) – 6.0 S.U.; pH (Maximum) – 9.0 S.U.; TSS – 100 mg/L; BOD_5 – 30 mg/L; COD – 120 mg/L; Ammonia (as N) – 2.4 mg/L; Total Nitrogen – 2.2 mg/L; Total Phosphorus – 2.0 mg/L.

[5] The following Quantification Levels (QLs) are applicable: TSS – 1.0 mg/L; BOD – 2 mg/L; COD – 10 mg/L: Ammonia (as N) – 0.20 mg/L; TKN – 0.50 mg/L.

1/6M = The semi-annual monitoring periods shall be January 1 – June 30 and July 1 – December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 10 and January 10, respectively).

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

A. Stormwater Monitoring Requirements

18. Outfall 019 – 300 Area (Building 322 General Lab)

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. During the period beginning with the permit's effective date and lasting until the expiration date the permittee is authorized to discharge from Outfall Number 019. Such discharges shall be monitored by the permittee as specified below.

c. Outfall 019 is substantially identical to Outfalls 1826, 1827, 1829, 1830, 1834, 1836, 1882, 1994, 2034, 2036, 2037, 2538, 2539, and 2540. Discharge data from Outfall 019 may be submitted to represent these outfalls.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[1]	Daily Maximum[1]	Minimum	Maximum[1]	Frequency	Sample Type
Flow (MGD)[2]	NL	NL	NA	NA	1/6M	Estimate
pH[6]	NA	NA	NL (S.U.)	NL (S.U.)	1/6M	Grab
Total Suspended Solids (TSS)[6,7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Nitrogen[1,3]	NA	NA	NA	NL (mg/L)	1/6M	Calculated
Total Kjeldahl Nitrogen (TKN)[4,7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Nitrate+Nitrite (NO_2+NO_3)[4]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Phosphorus[1,4]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Aluminum, Total Recoverable[5,6,7]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Cadmium, Dissolved[5,7]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Chromium, Dissolved[5,7]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Copper, Dissolved[5,6,7]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Copper, Total Recoverable[5,6,7]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Iron, Total Recoverable[5,6,7]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Lead, Dissolved[5,6,7]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Mercury, Dissolved[5,6,7]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Nickel, Dissolved[5,7]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Silver, Dissolved[5,7]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Zinc, Total Recoverable[5,6,7]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Hardness, Total (as $CaCO_3$)[5]	NA	NA	NA	NL (mg/L)	1/6M	Grab

[1] See Part I.B.

[2] The average flow is variable.

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
1/6M = Once every six months.

[3] Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests during each of the first four semi-annual monitoring periods.

[4] Samples shall be collected during each of the first four semi-annual monitoring periods.

[5] Samples for metals and hardness shall be collected concurrently.

[6] The following benchmark concentrations are applicable: pH (Minimum) – 6.0 S.U.; pH (Maximum) – 9.0 S.U.; TSS – 100 mg/L; Total Recoverable Aluminum – 750 µg/L; Dissolved Copper – 14 µg/L; Total Recoverable Copper – 18 µg/L; Total Recoverable Iron - 1.0 mg/L; Dissolved Lead – 16 µg/L; Dissolved Mercury – 2.2 µg/L; Total Recoverable Zinc – 120 µg/L.

[7] The following Quantification Levels (QLs) are applicable: TSS – 1.0 mg/L; TKN – 0.50 mg/L; Aluminum – 2.0 µg/L; Cadmium – 0.30 µg/L; Chromium – 0.5 µg/L; Copper – 2.8 µg/L; Iron – 1.0 µg/L; Lead – 3.4 µg/L; Mercury – 1.0 µg/L; Nickel – 0.5µg/L; Silver – 0.2 µg/L; Zinc – 26 µg/L.

1/6M = The semi-annual monitoring periods shall be January 1 – June 30 and July 1 – December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 10 and January 10, respectively).

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

A. Stormwater Monitoring Requirements

19. Outfall 020 – 300 Area (Building 324 Lab and Storage)

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. During the period beginning with the permit's effective date and lasting until the expiration date the permittee is authorized to discharge from Outfall Number 020. Such discharges shall be monitored by the permittee as specified below.

c. Outfall 020 is substantially identical to Outfalls 1814, 1821, 1824, 1927, 1931, 1933, 1938, 1941, and 2193. Discharge data from Outfall 020 may be submitted to represent these outfalls.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[1]	Daily Maximum[1]	Minimum	Maximum[1]	Frequency	Sample Type
Flow (MGD)[2]	NL	NL	NA	NA	1/6M	Estimate
pH[6]	NA	NA	NL (S.U.)	NL (S.U.)	1/6M	Grab
Total Suspended Solids (TSS)[6,7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Nitrogen[1,3]	NA	NA	NA	NL (mg/L)	1/6M	Calculated
Total Kjeldahl Nitrogen (TKN)[4,7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Nitrate+Nitrite (NO_2+NO_3)[4]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Phosphorus[1,4]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Mercury, Dissolved[5,7]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Hardness, Total (as $CaCO_3$)[5]	NA	NA	NA	NL (mg/L)	1/6M	Grab

[1] See Part I.B.

[2] The average flow is variable.

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
1/6M = Once every six months.

[3] Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests during each of the first four semi-annual monitoring periods.

[4] Samples shall be collected during each of the first four semi-annual monitoring periods.

[5] Samples for metals and hardness shall be collected concurrently.

[6] The following benchmark concentrations are applicable: pH (Minimum) – 6.0 S.U.; pH (Maximum) – 9.0 S.U.; TSS – 100 mg/L.

[7] The following Quantification Levels (QLs) are applicable: TSS – 1.0 mg/L; TKN – 0.50 mg/L; Mercury – 1.0 µg/L.

1/6M = The semi-annual monitoring periods shall be January 1 – June 30 and July 1 – December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 10 and January 10, respectively).

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

A. Stormwater Monitoring Requirements

20. Outfall 021 – 300 Area (Building 305 Night Vision)

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. During the period beginning with the permit's effective date and lasting until the expiration date the permittee is authorized to discharge from Outfall Number 021. Such discharges shall be monitored by the permittee as specified below.

c. Outfall 021 is substantially identical to Outfalls 1728, 1798, 1801, 1803, 1806, 1817, 2182, 2184, and 2185. Discharge data from Outfall 021 may be submitted to represent these outfalls.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[1]	Daily Maximum[1]	Minimum	Maximum[1]	Frequency	Sample Type
Flow (MGD)[2]	NL	NL	NA	NA	1/6M	Estimate
pH[6]	NA	NA	NL (S.U.)	NL (S.U.)	1/6M	Grab
Total Suspended Solids (TSS)[6,7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Nitrogen[1,3]	NA	NA	NA	NL (mg/L)	1/6M	Calculated
Total Kjeldahl Nitrogen (TKN)[4,7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Nitrate+Nitrite (NO_2+NO_3)[4]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Phosphorus[1,4]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Chromium, Dissolved[5,7]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Hardness, Total (as $CaCO_3$)[5]	NA	NA	NA	NL (mg/L)	1/6M	Grab

(1) See Part I.B.

(2) The average flow is variable.

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
1/6M = Once every six months.

(3) Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests during each of the first four semi-annual monitoring periods.

(4) Samples shall be collected during each of the first four semi-annual monitoring periods.

(5) Samples for metals and hardness shall be collected concurrently.

(6) The following benchmark concentrations are applicable: pH (Minimum) – 6.0 S.U.; pH (Maximum) – 9.0 S.U.; TSS – 100 mg/L.

(7) The following Quantification Levels (QLs) are applicable: TSS – 1.0 mg/L; TKN – 0.50 mg/L; Chromium – 0.5 µg/L.

1/6M = The semi-annual monitoring periods shall be January 1 – June 30 and July 1 – December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 10 and January 10, respectively).

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

A. Stormwater Monitoring Requirements

21. Outfall 022 – 300 Area (Marina)

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. During the period beginning with the permit's effective date and lasting until the expiration date the permittee is authorized to discharge from Outfall Number 022. Such discharges shall be monitored by the permittee as specified below.

c. Outfall 022 is substantially identical to Outfalls 1810, 1886, 1889, and 1892. Discharge data from Outfall 022 may be submitted to represent these outfalls.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[1]	Daily Maximum[1]	Minimum	Maximum[1]	Frequency	Sample Type
Flow (MGD)[2]	NL	NL	NA	NA	1/6M	Estimate
pH[6]	NA	NA	NL (S.U.)	NL (S.U.)	1/6M	Grab
Total Suspended Solids (TSS)[6,7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Nitrogen[1,3]	NA	NA	NA	NL (mg/L)	1/6M	Calculated
Total Kjeldahl Nitrogen (TKN)[4,7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Nitrate+Nitrite (NO_2+NO_3)[4]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Phosphorus[1,4]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Copper, Total Recoverable[5,6,7]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Zinc, Total Recoverable[5,6,7]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Hardness, Total (as $CaCO_3$)[5]	NA	NA	NA	NL (mg/L)	1/6M	Grab

[1] See Part I.B.

[2] The average flow is variable.

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
1/6M = Once every six months.

[3] Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests during each of the first four semi-annual monitoring periods.

[4] Samples shall be collected during each of the first four semi-annual monitoring periods.

[5] Samples for metals and hardness shall be collected concurrently.

[6] The following benchmark concentrations are applicable: pH (Minimum) – 6.0 S.U.; pH (Maximum) – 9.0 S.U.; TSS – 100 mg/L; Total Recoverable Copper – 18 µg/L; Total Recoverable Zinc - 120 µg/L.

[7] The following Quantification Levels (QLs) are applicable: TSS – 1.0 mg/L; TKN – 0.50 mg/L; Copper – 2.9 µg/L; Zinc - 29 µg/L.

1/6M = The semi-annual monitoring periods shall be January 1 – June 30 and July 1 – December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 10 and January 10, respectively).

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

A. Stormwater Monitoring Requirements

22. Outfall 023 – Building 1497 (Warehouses)

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. During the period beginning with the permit's effective date and lasting until the expiration date the permittee is authorized to discharge from Outfall Number 023. Such discharges shall be monitored by the permittee as specified below.

c. Outfall 023 is substantially identical to Outfalls 2753, 2755, 2766, 2769, 2781, 2796, 2949, and 2950. Discharge data from Outfall 023 may be submitted to represent these outfalls.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[1]	Daily Maximum[1]	Minimum	Maximum[1]	Frequency	Sample Type
Flow (MGD)[2]	NL	NL	NA	NA	1/6M	Estimate
pH[6]	NA	NA	NL (S.U.)	NL (S.U.)	1/6M	Grab
Total Suspended Solids (TSS)[6,7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Organic Carbon (TOC)[6]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Nitrogen[1,3]	NA	NA	NA	NL (mg/L)	1/6M	Calculated
Total Kjeldahl Nitrogen (TKN)[6,7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Nitrate+Nitrite (NO_2+NO_3)[4]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Phosphorus[1,4]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Arsenic, Total Recoverable[5,6,7]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Cadmium, Total Recoverable[5,6,7]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Chromium, Dissolved[5,6,7]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Copper, Dissolved[5,6,7]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Lead, Dissolved[5,6,7]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Lead, Total Recoverable[5,6,7]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Magnesium, Total Recoverable[5,6]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Mercury, Dissolved[5,6,7]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Mercury, Total Recoverable[5,6,7]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Nickel, Dissolved[5,6,7]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Selenium, Total Recoverable[5,6,7]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Silver, Total Recoverable[5,6,7]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Hardness, Total (as $CaCO_3$)[5]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Cyanide, Total[6]	NA	NA	NA	NL (µg/L)	1/6M	Grab

[1] See Part I.B.

[2] The average flow is variable.

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
1/6M = Once every six months.

[3] Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests during each of the first four semi-annual monitoring periods.

[4] Samples shall be collected during each of the first four semi-annual monitoring periods.

[5] Samples for metals and hardness shall be collected concurrently.

[6] The following benchmark concentrations are applicable: pH (Minimum) – 6.0 S.U.; pH (Maximum) – 9.0 S.U.; TSS – 100 mg/L; TKN – 1.5 mg/L; TOC – 110 mg/L; Total Recoverable Arsenic – 50 µg/L; Total Recoverable Cadmium – 2.1 µg/L; Dissolved Chromium - 32 µg/L; Dissolved Copper – 14 µg/L; Total Dissolved Lead – 16 µg/L; Total Recoverable Lead – 120 µg/L; Total Recoverable Magnesium – 64 µg/L; Total Recoverable Mercury – 1.4 µg/L; Total Recoverable Selenium – 5.0 µg/L; Total Recoverable Silver – 3.8 µg/L; Total Cyanide – 22 µg/L.

[7] The following Quantification Levels (QLs) are applicable: TSS – 1.0 mg/L; TKN – 0.50 mg/L; Arsenic - 90 µg/L; Cadmium – 0.39 µg/L; Chromium – 6.4 µg/L; Copper – 2.8 µg/L; Lead – 3.4 µg/L; Mercury – 1.0 µg/L; Nickel – 0.5 µg/L; Selenium – 3.0 µg/L; Silver – 0.42 µg/L.

1/6M = The semi-annual monitoring periods shall be January 1 – June 30 and July 1 – December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 10 and January 10, respectively).

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

A. Stormwater Monitoring Requirements

23. Outfall 024 – Aerospace Data Facility (SW)

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. During the period beginning with the permit's effective date and lasting until the expiration date the permittee is authorized to discharge from Outfall Number 024. Such discharges shall be monitored by the permittee as specified below.

c. Outfall 024 is substantially identical to Outfalls 5203, 5220, 5225, 5232, 5242, 5274, and 5280. Discharge data from Outfall 024 may be submitted to represent these outfalls.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[(1)]	Daily Maximum[(1)]	Minimum	Maximum[(1)]	Frequency	Sample Type
Flow (MGD)[(2)]	NL	NL	NA	NA	1/6M	Estimate
pH[(6)]	NA	NA	NL (S.U.)	NL (S.U.)	1/6M	Grab
Total Suspended Solids (TSS)[(6,7)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Organic Carbon (TOC)[(6)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Nitrogen[(1,3)]	NA	NA	NA	NL (mg/L)	1/6M	Calculated
Total Kjeldahl Nitrogen (TKN)[(6,7)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Nitrate+Nitrite (NO_2+NO_3)[(4)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Phosphorus[(1,4)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Arsenic, Total Recoverable[(5,6,7)]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Cadmium, Total Recoverable[(5,6,7)]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Chromium, Dissolved[(5,7)]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Copper, Dissolved[(5,6,7)]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Lead, Total Recoverable[(5,6,7)]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Magnesium, Total Recoverable[(5,6,7)]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Mercury, Total Recoverable[(5,6,7)]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Selenium, Total Recoverable[(5,6,7)]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Silver, Total Recoverable[(5,6,7)]	NA	NA	NA	NL (µg/L)	1/6M	Grab
Hardness, Total (as $CaCO_3$)[(5)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Cyanide, Total[(6)]	NA	NA	NA	NL (µg/L)	1/6M	Grab

(1) See Part I.B.

(2) The average flow is variable.

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
1/6M = Once every six months.

(3) Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests during each of the first four semi-annual monitoring periods.

(4) Samples shall be collected during each of the first four semi-annual monitoring periods.

(5) Samples for metals and hardness shall be collected concurrently.

(6) The following benchmark concentrations are applicable: pH (Minimum) – 6.0 S.U.; pH (Maximum) – 9.0 S.U.; TSS – 100 mg/L; TKN – 1.5 mg/L; TOC – 110 mg/L; Total Recoverable Arsenic – 50 µg/L; Total Recoverable Cadmium – 2.1 µg/L; Dissolved Copper – 14 µg/L; Total Recoverable Lead – 120 µg/L; Total Recoverable Magnesium – 64 µg/L; Total Recoverable Mercury – 1.4 µg/L; Total Recoverable Selenium – 5.0 µg/L; Total Recoverable Silver – 3.8 µg/L; Total Cyanide – 22 µg/L.

(7) The following Quantification Levels (QLs) are applicable: TSS – 1.0 mg/L; TKN – 0.50 mg/L; Arsenic - 90 µg/L; Cadmium – 0.39 µg/L; Chromium – 0.5 µg/L; Copper – 2.8 µg/L; Lead – 3.4 µg/L; Mercury – 1.0 µg/L; Selenium – 3.0 µg/L; Silver – 0.42 µg/L.

1/6M = The semi-annual monitoring periods shall be January 1 – June 30 and July 1 – December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 10 and January 10, respectively).

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

A. Stormwater Monitoring Requirements

24. Outfall 025 – Meade Road Contractor Lot

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. During the period beginning with the permit's effective date and lasting until the expiration date the permittee is authorized to discharge from Outfall Number 025. Such discharges shall be monitored by the permittee as specified below.

c. Outfall 025 is substantially identical to Outfalls 3345, 3346, and 3348. Discharge data from Outfall 025 may be submitted to represent these outfalls.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[1]	Daily Maximum[1]	Minimum	Maximum[1]	Frequency	Sample Type
Flow (MGD)[2]	NL	NL	NA	NA	1/6M	Estimate
pH[6]	NA	NA	NL (S.U.)	NL (S.U.)	1/6M	Grab
Total Suspended Solids (TSS)[6,7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Petroleum Hydrocarbons[4,6,7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Nitrogen[1,3]	NA	NA	NA	NL (mg/L)	1/6M	Calculated
Total Kjeldahl Nitrogen (TKN)[5,7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Nitrate+Nitrite (NO_2+NO_3)[5]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Phosphorus[1,5]	NA	NA	NA	NL (mg/L)	1/6M	Grab

[1] See Part I.B.

[2] The average flow is variable.

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
1/6M = Once every six months.

[3] Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests during each of the first four semi-annual monitoring periods.

[4] Total Petroleum Hydrocarbons (TPH) is the sum of individual gasoline range organics and diesel range organics or TPH-GRO and TPH-DRO to be measured by EPA SW 846 Method 8015 for gasoline and diesel range organics, or by EPA SW 846 Methods 8260 Extended and 8270 Extended.

[5] Samples shall be collected during each of the first four semi-annual monitoring periods.

[6] The following benchmark concentrations are applicable: pH (Minimum) – 6.0 S.U.; pH (Maximum) – 9.0 S.U.; TSS – 100 mg/L; TPH – 15 mg/L..

[7] The following Quantification Levels (QLs) are applicable: TSS – 1.0 mg/L; TKN – 0.50 mg/L; TPH – 0.5 mg/L.

1/6M = The semi-annual monitoring periods shall be January 1 – June 30 and July 1 – December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 10 and January 10, respectively).

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

A. Stormwater Monitoring Requirements

25. Outfall 026 – A08 and A09 (Markham School)

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. During the period beginning with the permit's effective date and lasting until the expiration date the permittee is authorized to discharge from Outfall Number 026. Such discharges shall be monitored by the permittee as specified below.

c. Outfall 026 is substantially identical to Outfalls 350, 377, and 584. Discharge data from Outfall 026 may be submitted to represent these outfalls.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[1]	Daily Maximum[1]	Minimum	Maximum[1]	Frequency	Sample Type
Flow (MGD)[2]	NL	NL	NA	NA	1/6M	Estimate
pH[5]	NA	NA	NL (S.U.)	NL (S.U.)	1/6M	Grab
Total Suspended Solids (TSS)[5,6]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Nitrogen[1,3]	NA	NA	NA	NL (mg/L)	1/6M	Calculated
Total Kjeldahl Nitrogen (TKN)[4,6]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Nitrate+Nitrite (NO_2+NO_3)[1,4]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Phosphorus[4]	NA	NA	NA	NL (mg/L)	1/6M	Grab

[1] See Part I.B.

[2] The average flow is variable.

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
1/6M = Once every six months.

[3] Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests during each of the first four semi-annual monitoring periods.

[4] Samples shall be collected during each of the first four semi-annual monitoring periods.

[5] The following benchmark concentrations are applicable: pH (Minimum) – 6.0 S.U.; pH (Maximum) – 9.0 S.U.; TSS – 100 mg/L.

[6] The following Quantification Levels (QLs) are applicable: TSS – 1.0 mg/L; TKN – 0.50 mg/L.

1/6M = The semi-annual monitoring periods shall be January 1 – June 30 and July 1 – December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 10 and January 10, respectively).

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

A. Stormwater Monitoring Requirements

26. Outfall 027 – A02 (Theote Landfill)

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. During the period beginning with the permit's effective date and lasting until the expiration date the permittee is authorized to discharge from Outfall Number 027. Such discharges shall be monitored by the permittee as specified below.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[(1)]	Daily Maximum[(1)]	Minimum	Maximum[(1)]	Frequency	Sample Type
Flow (MGD)[(2)]	NL	NL	NA	NA	1/6M	Estimate
pH[(5)]	NA	NA	NL (S.U.)	NL (S.U.)	1/6M	Grab
Total Suspended Solids (TSS)[(5,6)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Nitrogen[(1,3)]	NA	NA	NA	NL (mg/L)	1/6M	Calculated
Total Kjeldahl Nitrogen (TKN)[(4,6)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Nitrate+Nitrite (NO_2+NO_3)[(4)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Phosphorus[(1,4)]	NA	NA	NA	NL (mg/L)	1/6M	Grab

(1) See Part I.B.

(2) The average flow is variable.

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
1/6M = Once every six months.

(3) Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests during each of the first four semi-annual monitoring periods.

(4) Samples shall be collected during each of the first four semi-annual monitoring periods.

(5) The following benchmark concentrations are applicable: pH (Minimum) – 6.0 S.U.; pH (Maximum) – 9.0 S.U.; TSS – 100 mg/L.

(6) The following Quantification Levels (QLs) are applicable: TSS – 1.0 mg/L; TKN – 0.50 mg/L.

1/6M = The semi-annual monitoring periods shall be January 1 – June 30 and July 1 – December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 10 and January 10, respectively).

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

A. Stormwater Monitoring Requirements

27. Outfall 028 – A06 (Building 2310 Landfill)

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. During the period beginning with the permit's effective date and lasting until the expiration date the permittee is authorized to discharge from Outfall Number 028. Such discharges shall be monitored by the permittee as specified below.

c. Outfall 028 is substantially identical to Outfalls 4264, 4269, 4270, 4338, 5643, and 5644. Discharge data from Outfall 028 may be submitted to represent these outfalls.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[1]	Daily Maximum[1]	Minimum	Maximum[1]	Frequency	Sample Type
Flow (MGD)[2]	NL	NL	NA	NA	1/6M	Estimate
pH[5]	NA	NA	NL (S.U.)	NL (S.U.)	1/6M	Grab
Total Suspended Solids (TSS)[5,6]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Nitrogen[1,3]	NA	NA	NA	NL (mg/L)	1/6M	Calculated
Total Kjeldahl Nitrogen (TKN)[4,6]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Nitrate+Nitrite (NO_2+NO_3)[4]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Phosphorus[1,4]	NA	NA	NA	NL (mg/L)	1/6M	Grab

[1] See Part I.B.

[2] The average flow is variable.

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
1/6M = Once every six months.

[3] Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests during each of the first four semi-annual monitoring periods.

[4] Samples shall be collected during each of the first four semi-annual monitoring periods.

[5] The following benchmark concentrations are applicable: pH (Minimum) – 6.0 S.U.; pH (Maximum) – 9.0 S.U.; TSS – 100 mg/L.

[6] The following Quantification Levels (QLs) are applicable: TSS – 1.0 mg/L; TKN – 0.50 mg/L.

1/6M = The semi-annual monitoring periods shall be January 1 – June 30 and July 1 – December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 10 and January 10, respectively).

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

A. Stormwater Monitoring Requirements

28. Outfall 029 – A07 and A25 (Mulligan Road Landfill)

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. During the period beginning with the permit's effective date and lasting until the expiration date the permittee is authorized to discharge from Outfall Number 029. Such discharges shall be monitored by the permittee as specified below.

c. Outfall 029 is substantially identical to Outfall 6007. Discharge data from Outfall 029 may be submitted to represent this outfall.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[1]	Daily Maximum[1]	Minimum	Maximum[1]	Frequency	Sample Type
Flow (MGD)[2]	NL	NL	NA	NA	1/6M	Estimate
pH[5]	NA	NA	NL (S.U.)	NL (S.U.)	1/6M	Grab
Total Suspended Solids (TSS)[5,6]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Nitrogen[1,3]	NA	NA	NA	NL (mg/L)	1/6M	Calculated
Total Kjeldahl Nitrogen (TKN)[4,6]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Nitrate+Nitrite (NO_2+NO_3)[4]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Phosphorus[1,4]	NA	NA	NA	NL (mg/L)	1/6M	Grab

[1] See Part I.B.

[2] The average flow is variable.

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
1/6M = Once every six months.

[3] Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests during each of the first four semi-annual monitoring periods.

[4] Samples shall be collected during each of the first four semi-annual monitoring periods.

[5] The following benchmark concentrations are applicable: pH (Minimum) – 6.0 S.U.; pH (Maximum) – 9.0 S.U.; TSS – 100 mg/L.

[6] The following Quantification Levels (QLs) are applicable: TSS – 1.0 mg/L; TKN – 0.50 mg/L.

1/6M = The semi-annual monitoring periods shall be January 1 – June 30 and July 1 – December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 10 and January 10, respectively).

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

A. Stormwater Monitoring Requirements

29. Outfall 030 – A26 (Pohick Road Landfill)

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. During the period beginning with the permit's effective date and lasting until the expiration date the permittee is authorized to discharge from Outfall Number 030. Such discharges shall be monitored by the permittee as specified below.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[1]	Daily Maximum[1]	Minimum	Maximum[1]	Frequency	Sample Type
Flow (MGD)[2]	NL	NL	NA	NA	1/6M	Estimate
pH[5]	NA	NA	NL (S.U.)	NL (S.U.)	1/6M	Grab
Total Suspended Solids (TSS)[5,6]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Nitrogen[1,3]	NA	NA	NA	NL (mg/L)	1/6M	Calculated
Total Kjeldahl Nitrogen (TKN)[4,6]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Nitrate+Nitrite (NO_2+NO_3)[4]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Phosphorus[1,4]	NA	NA	NA	NL (mg/L)	1/6M	Grab

[1] See Part I.B.

[2] The average flow is variable.

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
1/6M = Once every six months.

[3] Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests during each of the first four semi-annual monitoring periods.

[4] Samples shall be collected during each of the first four semi-annual monitoring periods.

[5] The following benchmark concentrations are applicable: pH (Minimum) – 6.0 S.U.; pH (Maximum) – 9.0 S.U.; TSS – 100 mg/L.

[6] The following Quantification Levels (QLs) are applicable: TSS – 1.0 mg/L; TKN – 0.50 mg/L.

1/6M = The semi-annual monitoring periods shall be January 1 – June 30 and July 1 – December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 10 and January 10, respectively).

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

A. Stormwater Monitoring Requirements

30. Outfall 031 – NGA Area Pond 6

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. During the period beginning with the permit's effective date and lasting until the expiration date the permittee is authorized to discharge from Outfall Number 031. Such discharges shall be monitored by the permittee as specified below.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[(1)]	Daily Maximum[(1)]	Minimum	Maximum[(1)]	Frequency	Sample Type
Flow (MGD)[(2)]	NL	NL	NA	NA	1/6M	Estimate
pH[(5)]	NA	NA	NL (S.U.)	NL (S.U.)	1/6M	Grab
Total Suspended Solids (TSS)[(5,6)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Nitrogen[(3)]	NA	NA	NA	NL (mg/L)	1/6M	Calculated
Total Kjeldahl Nitrogen (TKN)[(4,6)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Nitrate+Nitrite (NO_2+NO_3)[(4)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Phosphorus[(1,4)]	NA	NA	NA	NL (mg/L)	1/6M	Grab

(1) See Part I.B.

(2) The average flow is variable.

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
1/6M = Once every six months.

(3) Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests during each of the first four semi-annual monitoring periods.

(4) Samples shall be collected during each of the first four semi-annual monitoring periods.

(5) The following benchmark concentrations are applicable: pH (Minimum) – 6.0 S.U.; pH (Maximum) – 9.0 S.U.; TSS – 100 mg/L.

(6) The following Quantification Levels (QLs) are applicable: TSS – 1.0 mg/L; TKN – 0.50 mg/L.

1/6M = The semi-annual monitoring periods shall be January 1 – June 30 and July 1 – December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 10 and January 10, respectively).

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

A. Stormwater Monitoring Requirements

31. Outfall 032 – NGA Pond Area 8

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. During the period beginning with the permit's effective date and lasting until the expiration date the permittee is authorized to discharge from Outfall Number 032. Such discharges shall be monitored by the permittee as specified below.

c. Outfall 032 is substantially identical to Outfalls 6209 and 6222. Discharge data from Outfall 032 may be submitted to represent these outfalls.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[(1)]	Daily Maximum[(1)]	Minimum	Maximum[(1)]	Frequency	Sample Type
Flow (MGD)[(2)]	NL	NL	NA	NA	1/6M	Estimate
pH[(7)]	NA	NA	NL (S.U.)	NL (S.U.)	1/6M	Grab
Total Suspended Solids (TSS)[(7,8)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Petroleum Hydrocarbons (TPH)[(3,7,8)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Chloride[(6)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Dissolved Solids (TDS)[(6)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Specific Conductance[(6)]	NA	NA	NA	NL (µmhos/cm)	1/6M	Grab
Total Nitrogen[(1,4)]	NA	NA	NA	NL (mg/L)	1/6M	Calculated
Total Kjeldahl Nitrogen (TKN)[(5,8)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Nitrate+Nitrite (NO_2+NO_3)[(5)]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Phosphorus[(1,5)]	NA	NA	NA	NL (mg/L)	1/6M	Grab

(1) See Part I.B.

(2) The average flow is variable.

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
1/6M = Once every six months.

(3) Total Petroleum Hydrocarbons (TPH) is the sum of individual gasoline range organics and diesel range organics or TPH-GRO and TPH-DRO to be measured by EPA SW 846 Method 8015 for gasoline and diesel range organics, or by EPA SW 846 Methods 8260 Extended and 8270 Extended.

(4) Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests during each of the first four semi-annual monitoring periods.

(5) Samples shall be collected during each of the first four semi-annual monitoring periods.

(6) Samples for chloride, total dissolved solids, and specific conductance shall be collected during the winter months associated with the semi-annual monitoring period (January 1 – June 30 and July 1 – December 31) when salt movements are occurring and/or salt is being applied.

(7) The following benchmark concentrations are applicable: pH (Minimum) – 6.0 S.U.; pH (Maximum) – 9.0 S.U.; TSS – 100 mg/L; TPH – 15 mg/L.

(8) The following Quantification Levels (QLs) are applicable: TSS – 1.0 mg/L; TPH – 0.5 mg/L: TKN – 0.50 mg/L.

1/6M = The semi-annual monitoring periods shall be January 1 – June 30 and July 1 – December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 10 and January 10, respectively).

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

A. Stormwater Monitoring Requirements

32. Outfall 033 – 249th Prime Power Motor Pool (Pohick and Theote Roads)

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. During the period beginning with the outfall's relocation and lasting until the expiration date, the permittee is authorized to discharge from Outfall Number 033. Such discharges shall be monitored by the permittee as specified below.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[1]	Daily Maximum[1]	Minimum	Maximum[1]	Frequency	Sample Type
Flow (MGD)[2]	NL	NL	NA	NA	1/6M	Estimate
pH[6]	NA	NA	NL (S.U.)	NL (S.U.)	1/6M	Grab
Total Suspended Solids (TSS)[6,7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Petroleum Hydrocarbons (TPH)[3,6,7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Nitrogen[1,4]	NA	NA	NA	NL (mg/L)	1/6M	Calculated
Total Kjeldahl Nitrogen (TKN)[5,7]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Nitrate+Nitrite (NO_2+NO_3)[5]	NA	NA	NA	NL (mg/L)	1/6M	Grab
Total Phosphorus[1,5]	NA	NA	NA	NL (mg/L)	1/6M	Grab

[1] See Part I.B.

[2] The average flow is variable.

MGD = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
1/6M = Once every six months.

[3] Total Petroleum Hydrocarbons (TPH) is the sum of individual gasoline range organics and diesel range organics or TPH-GRO and TPH-DRO to be measured by EPA SW 846 Method 8015 for gasoline and diesel range organics, or by EPA SW 846 Methods 8260 Extended and 8270 Extended.

[4] Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests during each of the first four monitoring periods (i.e., the first two years of permit coverage).

[5] Samples shall be collected during each of the first four monitoring periods (i.e., the first two years of permit coverage) for this outfall.

[6] The following benchmark concentrations are applicable: pH (Minimum) – 6.0 S.U.; pH (Maximum) – 9.0 S.U.; TSS – 100 mg/L; TPH – 15 mg/L.

[7] The following quantification levels (QLs) are applicable: TSS – 1.0 mg/L; TPH – 0.5 mg/L; TKN – 0.50 mg/L. See Part I.B.1 for additional information.

1/6M = The semi-annual monitoring periods shall be January 1 – June 30 and July 1 – December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 10 and January 10, respectively).

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

B. Quantification Levels and Compliance Reporting

1. Quantification Levels

   a. The quantification levels (QL) shall be less than or equal to those concentrations noted in Part I.A.1 through Part I.A.32 of this permit, respectively.

   b. The QL is defined as the lowest concentration used to calibrate a measurement system in accordance with the procedures published for the method. It is the responsibility of the permittee to ensure that proper quality assurance/quality control (QA/QC) protocols are followed during the sampling and analytical procedures. QA/QC information shall be documented to confirm that appropriate analytical procedures have been used and the required QLs have been attained. The permittee shall use any method in accordance with Part II.A of this permit.

2. Compliance Reporting for parameters in Part I.A.

   a. Monthly Average – Compliance with the monthly average limitations and/or reporting requirements for the parameters listed in Part I.A.1 through Part I.A.32 of this permit condition shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in Part I.A.1 through Part I.A.32 above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis shall be treated as it is reported. An arithmetic average shall be calculated using all reported data for the month, including the defined zeros. This arithmetic average shall be reported on the Discharge Monitoring Report (DMR) as calculated. If all data are below the QL used for the analysis, then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported monthly average concentration is <QL, then report "<QL" for the quantity. Otherwise use the reported concentration data (including the defined zeros) and flow data for each sample day to determine the daily quantity and report the monthly average of the calculated daily quantities.

   b. Daily Maximum - Compliance with the daily maximum limitations and/or reporting requirements for the parameters listed in Part I.A.1 through Part I.A.32 of this permit condition shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, collected within each day during the reporting month. The maximum value of these daily averages thus determined shall be reported on the DMR as the Daily Maximum. If all data are below the QL used for the analysis, then the maximum value of the daily averages shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported daily maximum is <QL, then report "<QL" for the quantity. Otherwise use the reported daily average concentrations (including the defined zeros) and corresponding daily flows to determine daily average quantities and report the maximum of the daily average quantities during the reporting month.

   c. Single Datum - Any single datum required shall be reported as "<QL" if it is less than the QL used in the analysis (QL must be less than or equal to the QL listed in Part I.A.1 through Part I.A.32 above). Otherwise the numerical value shall be reported.

   d. Significant Digits - The permittee shall report at least the same number of significant digits as the permit limit for a given parameter. Regardless of the rounding convention used by the permittee (i.e., 5 always rounding up or to the nearest even number), the permittee shall use the convention consistently, and shall ensure that consulting laboratories employed by the permittee use the same convention.

3. Nutrient Reporting Calculations for Part I. A

   a. For Total Phosphorus, all data below the quantification level (QL) for the analytical method used shall be reported as <QL where the laboratory's actual QL value is used in lieu of the letters "QL". All data equal to or above the QL for the analytical method used shall be treated as it is reported.

   b. For Total Nitrogen (TN), if both of the respective species are below the QL then < [the largest QL] used for the respective species shall be reported as the TN concentration. If one of the values is greater than or equal to the QL and the other is below the QL, then the value greater than or equal to the QL shall be reported as the TN

concentration. If both of the data are above the QL, the TN concentration value shall equal the sum of the data points as reported.

C. Other Requirements and Special Conditions

1. Notification Levels

The permittee shall notify the Department as soon as they know or have reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
   (1) One hundred micrograms per liter;
   (2) Two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter for antimony;
   (3) Five times the maximum concentration value reported for that pollutant in the permit application; or
   (4) The level established by the Board.

b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant, which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
   (1) Five hundred micrograms per liter;
   (2) One milligram per liter for antimony;
   (3) Ten times the maximum concentration value reported for that pollutant in the permit application; or
   (4) The level established by the Board.

2. Materials Handling/Storage

Any and all product, materials, industrial wastes, and/or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation, and/or storage of raw or intermediate materials, final product, by-product or wastes, shall be handled, disposed of, and/or stored in such a manner and consistent with Best Management Practices, so as not to permit a discharge of such product, materials, industrial wastes, and/or other wastes to State waters, except as expressly authorized.

3. Water Quality Criteria Monitoring – Solid Waste Management Units (SWMU)

a. The permittee shall provide an evaluation of all active Solid Waste Management Units (SWMU) within the drainage area of those outfalls identified in Part I.A.1 – Part I.A.32 of this permit. For purposes of this permit, an active SWMU is one that has been deemed active under Resource Conservation and Recovery Act (RCRA) regulations and is active as of the effective date of this permit. The evaluation shall include, but is not limited to, the following:

   (1) An evaluation of the drainage area for each outfall to determine the presence of SWMUs, active or closed;
   (2) A map showing the location of each SWMU within the drainage area for each outfall;
   (3) Designation of type and function of each SWMU within the drainage area for each outfall; and
   (4) To the extent available, information on wastes that are/were managed at each SWMU within the drainage area for each outfall.

   The permittee may use existing evaluations and/or studies to meet the SWMU evaluation required above.

b. To characterize the stormwater runoff from active SWMUs within the drainage area of those outfalls identified in Part I.A.1 – Part I.A.32 of this permit, the permittee shall monitor the discharge from any outfall identified as having an active SWMU (as defined in Part I.C.3.a above) within its drainage area for the substances noted in Attachment A of this VPDES permit. Monitoring for the substances noted in Attachment A, "Water Quality Criteria Monitoring" are to be conducted according to the indicated analysis number, quantification level, sample type and frequency. Monitoring is to be initiated after the start of the second year from the permit's effective date. Using Attachment A as the reporting form, the data and SWMU evaluation are to be submitted with the next application for reissuance which is due at least 180 days prior to the expiration date of this permit. The following conditions are applicable to the stormwater characterization:

   (1) If a SWMU is closed within the first two years of this permit, the permittee shall maintain documentation on site that closure has occurred in conformance with all applicable solid and/or hazardous waste requirements. Stormwater characterization shall not be required.

(2) If a SWMU is scheduled to close after the second year of this permit, the permittee shall prioritize those SWMUs for stormwater characterization prior to the end of the first five year permit term.

4. PCB Monitoring

The permitee shall characterize stormwater runoff and develop a plan for PCB sampling at the outfalls located downstream from all know historically contaminated sites. The stormwater characterization, development of a plan for PCB sampling, and the actual sampling shall be completed during the initial five year term of this permit and submitted with the next application for reissuance which is due at least 180 days prior to the expiration of this permit.

The sampling plan shall incorporate the following requirements:

a) Monitoring and analysis shall be conducted in accordance with the most current version of EPA Method 1668, or other equivalent methods capable of providing low-detection level, congener specific results (all 209 PCB congeners). PCB data generated using Method 1668 revisions A, B, and C are acceptable; however, data generated using version A is preferred;

b) Any equivalent method shall be submitted to DEQ-NRO for review and approval prior to sampling and analysis. The sampling protocol shall be submitted to DEQ-NRO for review and approval prior to the first sample collection. It is the responsibility of the permittee to ensure that proper QA/QC protocols are followed during the sample gathering and analytical procedures;

c) Each sample shall consist of a minimum 2 liter volume. The sample type, either a grab or automated composite, shall be at the discretion of the permittee;

d) The permittee shall submit the results electronically. The submittal shall include the unadjusted and appropriately qualified individual PCB congener analytical results; and

e) Laboratory and field QA/QC documentation and results shall be reported. Total PCBs are to be computed as the summation of the reported, quantified congeners.

5. Total Maximum Daily Load (TMDL) Reopener

This permit shall be modified or alternatively revoked and reissued if any approved wasteload allocation procedure, pursuant to Section 303(d) of the Clean Water Act, imposes wasteload allocations, limits or conditions on the facility that are not consistent with the permit requirements.

6. Form 2F Sampling

Form 2F sampling shall be completed and results submitted for all outfalls in which data was not provided with the permit application. The data shall be submitted with the next application for reissuance which is due at least 180 days prior to the expiration date of this permit.

7. Ethylene Glycol Prohibition

The use of Ethylene Glycol by the permittee and/or tenants is prohibited by this permit.

8. Effluent Limitation Guideline (ELG) Reopener

This permit may be reopened to address compliance with EPA regulations and any applicable ELG that may be developed and approved for the airline industry.

Part II. Conditions Applicable To All VPDES Permits

A. Monitoring

1. Samples and measurements required by this permit shall be taken at the permit designated or approved location and be representative of the monitored activity.
   a. Monitoring shall be conducted according to procedures approved under Title 40 Code of Federal Regulations Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this permit.
   b. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will insure accuracy of measurements.
   c. Samples taken shall be analyzed in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

2. Any pollutant specifically addressed by this permit that is sampled or measured at the permit designated or approved location more frequently than required by this permit shall meet the requirements in A 1 a through c above and the results of this monitoring shall be included in the calculations and reporting required by this permit.

3. Operational or process control samples or measurements shall not be taken at the designated permit sampling or measurement locations. Operational or process control samples or measurements do not need to follow procedures approved under Title 40 Code of Federal Regulations Part 136 or be analyzed in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

B. Records

1. Records of monitoring information shall include:
   a. The date, exact place, and time of sampling or measurements;
   b. The individual(s) who performed the sampling or measurements;
   c. The date(s) and time(s) analyses were performed;
   d. The individual(s) who performed the analyses;
   e. The analytical techniques or methods used; and
   f. The results of such analyses.

2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the Board.

C. Reporting Monitoring Results

1. The permittee shall submit the results of the monitoring required by this permit not later than the 10th day of the month after monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to:

   Department of Environmental Quality - Northern Regional Office (DEQ-NRO)
   13901 Crown Court
   Woodbridge, VA 22193

2. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved or specified by the Department.

3. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

D. Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any information which the Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Board may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from this discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

E. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized Discharges

Except in compliance with this permit, or another permit issued by the Board, it shall be unlawful for any person to:

1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or
2. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, or for recreation, or for other uses.

G. Reports of Unauthorized Discharges

Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part II.F.; or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part II.F., shall notify the Department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the Department, within five days of discovery of the discharge. The written report shall contain:

1. A description of the nature and location of the discharge;
2. The cause of the discharge;
3. The date on which the discharge occurred;
4. The length of time that the discharge continued;
5. The volume of the discharge;
6. If the discharge is continuing, how long it is expected to continue;
7. If the discharge is continuing, what the expected total volume of the discharge will be; and
8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.

Discharges reportable to the Department under the immediate reporting requirements of other regulations are exempted from this requirement.

H. Reports of Unusual or Extraordinary Discharges

If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter state waters, the permittee shall promptly notify, in no case later than 24 hours, the Department by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse affects on aquatic life and the known number of fish killed. The permittee shall reduce the report to writing and shall submit it to the Department within five days of discovery of the discharge in accordance with Part II.I.2. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:

1. Unusual spillage of materials resulting directly or indirectly from processing operations;
2. Breakdown of processing or accessory equipment;
3. Failure or taking out of service some or all of the treatment works; and
4. Flooding or other acts of nature.

I. Reports of Noncompliance

The permittee shall report any noncompliance which may adversely affect state waters or may endanger public health.

1. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this paragraph:
   a. Any unanticipated bypass; and
   b. Any upset which causes a discharge to surface waters.

2. A written report shall be submitted within 5 days and shall contain:
   a. A description of the noncompliance and its cause;
   b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
   c. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

   The Board may waive the written report on a case-by-case basis for reports of noncompliance under Part II.I. if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

3. The permittee shall report all instances of noncompliance not reported under Parts II, I.1.or I.2., in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part II.I.2.

NOTE: The immediate (within 24 hours) reports required in Parts II, G., H. and I. may be made to the Department's Northern Regional Office at (703) 583-3800 (voice) or (703) 583-3821 (fax) or online at **http://www.deq.virginia.gov/Programs/PollutionResponsePreparedness/MakingaReport.aspx** . For reports outside normal working hours, leave a message and this shall fulfill the immediate reporting requirement. For emergencies, the Virginia Department of Emergency Services maintains a 24-hour telephone service at 1-800-468-8892.

J. Notice of Planned Changes

1. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

   a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:

      1) After promulgation of standards of performance under Section 306 of Clean Water Act which are applicable to such source; or
      2) After proposal of standards of performance in accordance with Section 306 of Clean Water Act which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal;

   b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations nor to notification requirements specified elsewhere in this permit; or

   c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

2. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

K. Signatory Requirements

1. Applications. All permit applications shall be signed as follows:

   a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
      1) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or

      2) The manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

   b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

   c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes:

      1) The chief executive officer of the agency, or
      2) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

2. Reports, etc. All reports required by permits, and other information requested by the Board shall be signed by a person described in Part II.K.1., or by a duly authorized representative of that person. A person is a duly authorized representative only if:

   a. The authorization is made in writing by a person described in Part II.K.1.;

   b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and

   c. The written authorization is submitted to the Department.

3. Changes to authorization. If an authorization under Part II.K.2. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part II.K.2. shall be submitted to the Department prior to or together with any reports, or information to be signed by an authorized representative.

4. Certification. Any person signing a document under Parts II, K.1. or K.2. shall make the following certification:

   "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

L. Duty to Comply

The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this permit has not yet been modified to incorporate the requirement.

M. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. All permittees with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Board. The Board shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

N. Effect of a Permit

This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

O. State Law

Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by Section 510 of the Clean Water Act. Except as provided in permit conditions on "bypassing" (Part II.U.), and "upset" (Part II.V.) nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

P. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Sections 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

Q. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

R. Disposal of Solids or Sludges

Solids, sludges or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

S. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

U. Bypass

1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts II, U.2. and U.3.

2. Notice
   a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least ten days before the date of the bypass.
   b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II.I.

3. Prohibition of bypass.
   a. Bypass is prohibited, and the Board may take enforcement action against a permittee for bypass, unless:
      1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
      2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
      3) The permittee submitted notices as required under Part II.U.2.

   b. The Board may approve an anticipated bypass, after considering its adverse effects, if the Board determines that it will meet the three conditions listed above in Part II.U.3.a.

V. Upset

1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part II.V.2. are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.

2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

   a. An upset occurred and that the permittee can identify the cause(s) of the upset;
   b. The permitted facility was at the time being properly operated;
   c.The permittee submitted notice of the upset as required in Part II.I.; and
   d. The permittee complied with any remedial measures required under Part II.S.

3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

W. **Inspection and Entry**

The permittee shall allow the Director, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

X. Permit Actions

Permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Y. Transfer of Permits

1. Permits are not transferable to any person except after notice to the Department. Except as provided in Part II.Y.2., a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made, to identify the new permittee and incorporate such other requirements as may be necessary under the State Water Control Law and the Clean Water Act.

2. As an alternative to transfers under Part II.Y.1., this permit may be automatically transferred to a new permittee if:
   a. The current permittee notifies the Department at least 30 days in advance of the proposed transfer of the title to the facility or property;
   b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
   c. The Board does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part II.Y.2.b.

Z. Severability

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

Part III. Industrial Stormwater Management Conditions and Requirements

A. Stormwater Management Conditions

1. Sample Type.

   For all stormwater monitoring required in Part I.A**,** or other applicable sections of this permit, a minimum of one grab sample shall be taken. Unless otherwise specified, all samples (except snowmelt samples) shall be collected from the discharge resulting from a storm event that results in an actual discharge from the site (defined as a "measurable storm event"), and that occurs at least 72 hours from the previously measurable storm event. The required 72-hour storm interval is waived where the permittee is able to document that less than a 72-hour interval is representative for local storm events during the sampling period.

   Grab samples shall be collected within the first 30 minutes or as soon thereafter as practical, but not to exceed three hours, of when the runoff or snowmelt begins discharging from the facility. If the collection of a grab sample during the first 30 minutes is impracticable, the permittee shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If stormwater discharges associated with industrial activity commingle with process or non-process water, then where practicable permittees shall attempt to sample the stormwater discharge before it mixes with the non-stormwater discharge.

2. Recording of Results.

   For each storm event monitored under Part I.A of this permit, the permittee shall record and retain on site with the Stormwater Pollution Prevention Plan (SWPPP) the following information:

   a. The date and duration (in hours) of the storm event(s) sampled;

   b. The rainfall total (in inches) of the storm event which generated the sampled discharge; and

   c. The duration between the storm event sampled and the end of the previous measurable storm event.

3. Additional Reporting.

   In addition to submitting copies of Discharge Monitoring Report (DMR) forms in accordance with Part II.C, permittees with at least one stormwater discharge associated with industrial activity through a regulated municipal separate storm sewer system (MS4) shall also submit signed copies of DMRs to the MS4 operator at the same time as the reports are submitted to the Department. Permittees not required to report monitoring data and permittees that are otherwise not required to monitor their discharges need not comply with this provision.

4. Representative Outfalls (Substantially Identical Discharges).

   If the facility has two or more outfalls that discharge substantially identical effluents, based on similarities of the industrial activities, significant materials, size of drainage areas, and stormwater management practices occurring within the drainage areas of the outfalls, the permittee may conduct monitoring on the effluent of just one of the outfalls and report that the observations also apply to the substantially identical outfall(s). The substantially identical outfall monitoring provision is only applicable to quarterly visual examinations as established in Part III.A.5 of this permit (Quarterly Visual Examination of Stormwater Quality).

   The permittee shall include in the SWPPP a description of the location of the outfalls and explain in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (i.e., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)) shall be provided in the plan.

5. Quarterly Visual Examination of Stormwater Quality.

   Unless another more frequent schedule is established elsewhere in this permit, the permittee shall perform and document a quarterly visual examination of a stormwater discharge associated with industrial activity from each outfall, except discharges exempted below. The examination(s) shall be made at least once in each of the following three-month periods: January through March, April through June, July through September, and October through December. The visual examination shall be made during normal working hours, where practicable, when considerations for safety and feasibility allow. The documentation shall be signed and certified in accordance with Part II.K (Signatory Requirements) of this permit.

   a. Visual Examinations shall be made of samples collected in accordance with Part III.A.1 (Stormwater Management Conditions – Sample Type). Where practicable, the same individual should carry out the collection and examination of discharges for the entire permit term. If no qualifying storm event resulted in runoff during normal working hours from the facility during a monitoring quarter, the permittee is excused from visual monitoring for that quarter provided that documentation is included with the monitoring records indicating that no qualifying storm event occurred during normal working hours that resulted in stormwater runoff during that quarter. The documentation shall be signed and certified in accordance with Part II.K (Signatory Requirements) of this permit.

   b. The visual examination reports shall be maintained on-site with the SWPPP. The report shall include the outfall location, the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the stormwater discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution), and probable sources of any observed stormwater contamination.

   c. If the facility has two or more outfalls that discharge substantially identical effluents, the permittee may conduct visual monitoring in accordance with Part III.A.4 (Stormwater Management Conditions – Representative Outfalls) of the permit.

   d. When the permittee is unable to conduct the visual examination due to adverse climatic conditions, the permittee shall document the reason for not performing the visual examination and retain this documentation onsite with the records of the visual examinations. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

6. Non-Stormwater Discharges.

   a. The following non-stormwater discharges are authorized by this permit:

      (1) Discharges from fire fighting activities;

      (2) Fire hydrant flushings;

      (3) Potable water including water line flushings;

      (4) Uncontaminated condensate from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids;

      (5) Irrigation drainage;

      (6) Landscape watering provided all pesticides, herbicides, and fertilizers have been applied in accordance with the approved labeling;

      (7) Pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);

      (8) Routine external building wash down which does not use detergents;

      (9) Uncontaminated ground water or spring water;

      (10) Foundation or footing drains where flows are not contaminated with process materials such as solvents; and

(11) Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but NOT intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains).

b. All other non-stormwater discharges not specifically identified above or in Part I.A of this permit are not authorized and shall either be eliminated or covered under a separate VPDES permit.

c. The following non-stormwater discharges are specifically not authorized by this permit:

(1) Sector A – Timber Product Facilities (Outfall 017)
Discharges of stormwater from areas where there may be contact with chemical formulations sprayed to provide surface protection.

(2) Sector C – Chemical and Allied Products Manufacturing (Outfall 017)
Inks, paints, or substances (hazardous, nonhazardous, etc.) resulting from an on-site spill, including materials collected in drip pans; washwaters from material handling and processing areas; or washwaters from drum, tank, or container rinsing and cleaning.

(3) Sector K – Hazardous Waste Treatment, Storage or Disposal Facilities (Outfall 005, Outfall 008, Outfall 012, Outfall 023, and Outfall 024)
Leachate, gas collection condensate, drained free liquids, contaminated ground water, laboratory-derived wastewater and contact washwater from washing truck, equipment, and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill facility.

(4) Sector L - Landfills (Outfall 007 and Outfall 025)
Leachate, gas collection condensate, drained free liquids, contaminated ground water, laboratory wastewater, and contact washwater from washing truck, equipment, and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill facility.

(5) Sector P – Land Transportation and Warehousing (Outfall 006, Outfall 010, Outfall 011, Outfall 015, Outfall 032, and Outfall 033)
Vehicle, equipment, or surface washwater, including tank cleaning operations.

(6) Sector Q – Water Transportation (Outfall 016 and Outfall 022)
Bilge and ballast water, sanitary wastes, pressure wash water, and cooling water originating from vessels.

(7) Sector S – Air Transportation (Outfall 001, Outfall 002 and Outfall 003)
Aircraft, ground vehicle, runway and equipment washwaters; and dry weather discharges of deicing and anti-icing chemicals.

7. Releases of Hazardous Substances or Oil in Excess of Reportable Quantities.

The discharge of hazardous substances or oil in the stormwater discharge(s) from a facility shall be prevented or minimized in accordance with the applicable SWPPP for the facility. This permit does not authorize the discharge of hazardous substances or oil resulting from an onsite spill. This permit does not relieve the permittee of the reporting requirements of 40 CFR 110, 40 CFR 117 and 40 CFR 302 or § 62.1-44.34:19 of the Code of Virginia. Where a release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR 110, 40 CFR 117 or 40 CFR 302 occurs during a 24-hour period:

a. The permittee is required to notify the Department in accordance with the requirements of Part II.G (Reports of Unauthorized Discharges) of this permit as soon as he or she has knowledge of the discharge;

b. Where a release enters a regulated MS4, the permittee shall also notify the owner of the MS4; and

c. The SWPPP required by this permit shall be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan shall be modified where appropriate.

8. Water Quality Protection.

   The stormwater discharges authorized by this permit shall be controlled as necessary to meet applicable water quality standards. DEQ expects that compliance with the conditions in this permit will control discharges as necessary to meet applicable water quality standards.

9. Corrective Actions.

   a. For Discharges Exceeding Benchmark Concentrations. If the monitoring result exceeds the benchmark concentration value for that parameter established in Part I.A.1 – Part I.A.33 of this permit, the permittee shall review the SWPPP and modify it as necessary to address any deficiencies that caused the exceedance. Revisions to the SWPPP shall be completed within 30 days after an exceedance is discovered.

      When control measures need to be modified or added (distinct from regular preventive maintenance of existing control measures described in Part III.C.2.d) implementation shall be completed before the next anticipated storm event if possible, but no later than 60 days after the exceedance is discovered, or as otherwise provided or approved by the DEQ Northern Regional Office. In cases where construction is necessary to implement control measures, the permittee shall include a schedule in the SWPPP that provides for the completion of the control measures as expeditiously as practicable, but no later than three years after the exceedance is discovered. Where a construction compliance schedule is included in the SWPPP, the plan shall include appropriate nonstructural and temporary controls to be implemented in the affected portion(s) of the facility prior to completion of the permanent control measure. Any control measure modification(s) shall be documented and dated, and retained with the SWPPP, along with the amount of time taken to modify the applicable control measure or implement additional control measures.

   b. Natural Background Pollutant Levels. If the concentration of a pollutant exceeds a benchmark concentration, and the permittee determines that exceedance of the monitoring endpoint is attributable solely to the presence of that pollutant in the natural background, corrective action is not required provided that:

      (1) The concentration of the action level is less than or equal to the concentration of that pollutant in the natural background;

      (2) The permittee documents and maintains with the SWPPP the supporting rationale for concluding that monitoring endpoint exceedances are in fact attributable solely to natural background pollutant levels. The supporting rationale shall include any data previously collected by the facility or others (including literature studies) that describe the levels of natural background pollutants in the facility's stormwater discharges; and

      (3) The permittee notifies the DEQ Northern Regional Office on the DMR that the action level exceedances are attributable solely to natural background pollutant levels.

      Natural background pollutants include those substances that are naturally occurring in soils or groundwater. Natural background pollutants do not include legacy pollutants from earlier activity on the facility’s site, or pollutants in run-on from neighboring sources which are not naturally occurring.

   c. Additional Corrective Actions. The permittee shall take corrective action whenever:

      (1) Routine facility inspections, comprehensive site compliance evaluations, inspections by local, state or federal officials, or any other process, observation or event result in a determination that modifications to the stormwater control measures are necessary to meet the permit requirements; or

      (2) There is any exceedance of a Total Maximum Daily Load (TMDL) wasteload allocation; or

      (3) DEQ determines, or the permittee becomes aware, that the stormwater control measures are not stringent enough for the discharge to meet applicable water quality standards.

      Any corrective actions taken shall be documented and retained with the SWPPP. Reports of corrective actions shall be signed in accordance with Part II.K (Signatory Requirements).

10. Follow-Up Monitoring and Reporting.

    If at any time monitoring results indicate that stormwater discharges from the facility exceed a TMDL wasteload allocation or the DEQ Northern Regional Office determines that discharges from the facility are causing or contributing to an exceedance of a water quality standard, immediate steps shall be taken to eliminate the exceedances in accordance with Part III.A.9 (Corrective Actions). Within 30 calendar days of implementing the relevant corrective action(s), an exceedance report shall be submitted to the DEQ Northern Regional Office. The following information must be included in the report: permit number; facility name, address and location; receiving water; monitoring data from this event; an explanation of the situation; description of what has been done and the intended actions (should the corrective actions not yet be complete) to further reduce pollutants in the discharge; and an appropriate contact name and phone number.

B. Discharges of Industrial Stormwater to Waters Subject to the Chesapeake Bay TMDL

1. Facilities in the Chesapeake Bay Watershed.

    a. Owners of facilities in the Chesapeake Bay watershed shall monitor their industrial stormwater discharges for total suspended solids (TSS), total nitrogen (TN) and total phosphorus (TP) to characterize the contributions from their facility's specific industrial sector for these parameters. Samples shall be collected during each of the first four monitoring periods (i.e., the first two years of permit coverage). Monitoring periods are specified in Part I.A. Samples shall be collected and analyzed in accordance with Part I.A. Monitoring results shall be reported in accordance with Part I.A and Part II.C, and retained in accordance with Part II.B.

    b. Data analysis and Chesapeake Bay TMDL action plans. The permittee shall analyze the nutrient and sediment data collected in accordance with Part III.B.1.a to determine if additional action is needed for this permit term. The permittee shall average the data collected for each of the pollutants of concern (POC) (e.g., TP, TN and TSS) and compare the results to the loading values below for TP, TN and TSS. To calculate the facility loadings, the permittee shall use either the actual annual average rainfall data for the facility location (in inches/year) or the Virginia annual average rainfall of 44.3 inches/year.

TP – High (80%) imperviousness industrial; 1.5 lb/ac/yr

TN – High (80%) imperviousness industrial; 12.3 lb/ac/yr

TSS – High (80%) imperviousness industrial; 440 lb/ac/yr

2. Calculations and Necessary Actions.

    a. The following formula or a site specific, DEQ-approved calculation shall be used to determine the loading value:

$$L = 0.226 \times R \times C \qquad \text{Equation (1)}$$

where:

$L =$	the Pollutant of Concern (POC) loading value (lb/acre/year)
$C =$	the POC average concentration of all facility samples (mg/L)
$0.226 =$	unit conversion factor
$R =$	annual runoff (in/yr), calculated as: $R = P \times P_j \times R_v$

where:

$P =$	annual rainfall (in/yr) [use the Virginia annual average of 44.3 in/yr, or site specific annual rainfall for your area of the State]
$P_j =$	the fraction of annual events that produce runoff (usually 0.9)

R = the runoff coefficient, which can be expressed as: $R_v = 0.05 + (0.9 \times I_a)$
I_a = the impervious fraction [the ratio of facility impervious area to the total facility area] or I_a = AREA IMPERVIOUS / AREA TOTAL

Substituting in Equation (1):

$$L = 0.226 \times P \times P_j \times (0.05 + (0.9 \times I_a)) \times C \quad \text{Equation (2)}$$

b. If the calculated facility loading value for TP, TN or TSS is less than the corresponding loading value presented in subdivision Part III.B.1.b, then the calculations demonstrating that no reduction is necessary shall be submitted within 90 days from the end of the second year's monitoring period. The calculations shall include a site map with the total site area, the areas associated with industrial activity and the total impervious area.

c. If the calculated facility loading value for TP, TN or TSS exceeds the corresponding loading value presented in Part III.B.1.b, then the permittee shall develop and submit a Chesapeake Bay TMDL Action Plan to DEQ for review and approval. The plan shall include a site map with the total site area, the areas associated with industrial activity and the total impervious area. The permittee shall implement the applicable elements of the approved plan over the remaining term of this permit and achieve all the necessary reductions by June 30, 2024. The plan shall be submitted within 90 days from the end of the second year's monitoring period.

The action plan shall include:

(1) A determination of the total pollutant load reductions for TP, TN and TSS (as appropriate) necessary to reduce the annual loads from industrial activities. This shall be determined by calculating the difference between the loading values listed in Part III.B.1.b and the average of the sampling data for TP, TN or TSS (as appropriate) for the entire facility. The reduction applies to the total difference calculated for each pollutant of concern.

(2) The means and methods, such as management practices and retrofit programs, that will be utilized to meet the required reductions determined in (1) above and a schedule to achieve those reductions by June 30, 2024. The schedule should include annual benchmarks to demonstrate the ongoing progress in meeting those reductions.

(3) The permittee may consider utilization of any pollutant trading or offset program in accordance with §§ 62.1-44.19:20 through 62.1-44.19:23 of the Code of Virginia, governing trading and offsetting, to meet the required reductions.

(4) Permittees required to develop and implement a Chesapeake Bay TMDL Action Plan shall submit an annual report to the department by June 30th of each year describing the progress in meeting the required reductions.

3. Discharges Through A Regulated MS4.

In addition to the requirements of this permit, any facility with industrial activity discharges through a regulated MS4 that is notified by the MS4 operator that the locality has adopted ordinances to meet the Chesapeake Bay TMDL shall incorporate measures and controls into their SWPPP to comply with applicable local TMDL ordinance requirements.

4. Expansion of Facilities.

a. For any industrial activity area expansions (i.e., construction activities, including clearing, grading and excavation activities) that commence on or after the effective date of this permit, the permittee shall document in the SWPPP the information and calculations used to determine the nutrient and sediment loadings discharged from the expanded land area prior to the land being developed and the measures and controls that were employed to meet the no net increase of stormwater nutrient and sediment load as a result of the expansion of the industrial activity. Any land disturbance that is exempt from permitting under the VPDES construction stormwater general permit regulation (9VAC25-880) is exempt from this requirement.

b. The permittee may use the Virginia Stormwater Management Program (VSMP) water quality design criteria to meet the requirements of subdivision "a" of this subsection. Under these criteria, the total phosphorus load shall not exceed the greater of: (i) the total phosphorus load that was discharged from the expanded portion of the land prior to the land being developed for the industrial activity or (ii) 0.41 pounds per acre per year. Compliance with the water quality design criteria may be determined utilizing the Virginia Runoff Reduction Method or another equivalent methodology approved by the Board. Design specifications and pollutant removal efficiencies for specific BMPs can be found on the Virginia Stormwater BMP Clearinghouse website at http://www.vwrrc.vt.edu/swc.

c. The permittee may consider utilization of any pollutant trading or offset program in accordance with §§ 62.1-44.19:20 through 62.1-44.19:23 of the Code of Virginia, governing trading and offsetting to meet the no net increase requirement.

C. Stormwater Pollution Prevention Plan

A stormwater pollution prevention plan (SWPPP) shall be developed and implemented for the facility. The SWPPP is intended to document the selection, design, and installation of control measures, including BMPs to eliminate or reduce the pollutants in all stormwater discharges from the facility and to meet applicable water quality standards. Permittees shall implement the provisions of the stormwater pollution prevention plan as a condition of this permit.

The stormwater pollution prevention plan requirements of this permit may be fulfilled, in part, by incorporating by reference other plans or documents such as a spill prevention control and countermeasure (SPCC) plan developed for the facility under Section 311 of the Clean Water Act, or best management practices (BMP) programs otherwise required for the facility, provided that the incorporated plan meets or exceeds the plan requirements of Part III.C.2 (Contents of the Plan). All plans incorporated by reference into the stormwater pollution prevention plan become enforceable under this permit. If a plan incorporated by reference does not contain all of the required elements of the SWPPP (Part III.C.2 – Contents of the Plan), the permittee shall develop the missing SWPPP elements and include them in the required plan.

1. Deadlines for Plan Preparation and Compliance.

   a. The facility shall prepare and implement a SWPPP as expeditiously as practicable, but not later than 90 days from the effective date of this permit.

   b. Measures That Require Construction. In cases where construction is necessary to implement measures required by the plan, the plan shall contain a schedule that provides compliance with the plan as expeditiously as practicable, but no later than 3 years after the effective date of this permit. Where a construction compliance schedule is included in the plan, the schedule shall include appropriate nonstructural and/or temporary controls to be implemented in the affected portion(s) of the facility prior to completion of the permanent control measure.

2. Contents of the Plan.

   The contents of the SWPPP shall comply with the requirements listed below. The plan shall include, at a minimum, the following items:

   a. Pollution Prevention Team. The plan shall identify the staff individuals by name or title that comprise the facility's stormwater pollution prevention team. The pollution prevention team is responsible for assisting the facility or plant manager in developing, implementing, maintaining, revising and ensuring compliance with the facility's SWPPP. Specific responsibilities of each staff individual on the team shall be identified and listed.

   b. Site Description. The plan shall include the following:

      (1) Activities at the Facility. A description of the nature of the industrial activities at the facility.

      (2) General Location Map. A general location map (e.g., USGS quadrangle or other map) with enough

detail to identify the location of the facility and the receiving waters within one mile of the facility.

(3) Site Map. A site map identifying the following:

(a) The boundaries of the property and the size of the property (in acres);

(b) The location and extent of significant structures and impervious surfaces (roofs, paved areas and other impervious areas);

(c) Locations of all stormwater conveyances including ditches, pipes, swales and inlets and the directions of stormwater flow (use arrows to show which ways stormwater will flow);

(d) Locations of all existing structural and source control measures including BMPs;

(e) Locations of all surface water bodies, including wetlands;

(f) Locations of potential pollutant sources identified under Part III.C.2.c (Summary of Potential Pollutant Sources);

(g) Locations where significant spills or leaks identified under Part III.C.2.c.3 (Summary of Potential Pollutant Sources – Spills and Leaks) have occurred;

(h) Locations of the following activities where such activities are exposed to precipitation: fueling stations; vehicle and equipment maintenance and cleaning areas; loading and unloading areas; locations used for the treatment, storage or disposal of wastes; liquid storage tanks; processing and storage areas; access roads, rail cars and tracks; transfer areas for substances in bulk; and machinery;

(i) Locations of stormwater outfalls and an approximate outline of the area draining to each outfall, and location of municipal storm sewer systems, if the stormwater from the facility discharges to them;

(j) Location and description of all non-stormwater discharges;

(k) Location of any storage piles containing salt used for deicing or other commercial or industrial purposes; and

(l) Locations and sources of runon to the site from adjacent property, where the runon contains significant quantities of pollutants; and

(m) Locations of all stormwater monitoring points.

(4) Receiving Waters and Wetlands. The name of all surface waters receiving discharges from the site, including intermittent streams, dry sloughs and arroyos. Provide a description of wetland sites that may receive discharges from the facility. If the facility discharges through a MS4, identify the MS4 operator and the receiving water to which the MS4 discharges.

c. Summary of Potential Pollutant Sources. The plan shall identify each separate area at the facility where industrial materials or activities are exposed to stormwater. Industrial materials or activities include, but are not limited to: material handling equipment or activities, industrial machinery, raw materials, industrial production and processes, intermediate products, byproducts, final products and waste products. Material handling activities include, but are not limited to: the storage, loading and unloading, transportation, disposal or conveyance of any raw material, intermediate product, final product or waste product. For each separate area identified, the description shall include:

(1) Activities in Area. A list of the activities exposed to stormwater (e.g., material storage, equipment fueling and cleaning, cutting steel beams); and

(2) Pollutants. A list of the pollutant(s) constituents (e.g., crankcase oil, zinc, sulfuric acid, cleaning solvents etc.) associated with each industrial activity. The pollutant list shall include all significant

materials handled, treated, stored or disposed that have been exposed to stormwater in the three years prior to the date the SWPPP was prepared or amended. The list shall include any hazardous substances or oil at the facility.

(3) Spills and Leaks. The SWPPP shall clearly identify areas where potential spills and leaks that can contribute pollutants to stormwater discharges can occur and their corresponding outfalls. The plan shall include a list of significant spills and leaks of toxic or hazardous pollutants that actually occurred at exposed areas or that drained to a stormwater conveyance during the three-year period prior to the date the SWPPP was prepared or amended. The list shall be updated if significant spills or leaks occur in exposed areas of the facility during the term of the permit. Significant spills and leaks include, but are not limited to, releases of oil or hazardous substances in excess of reportable quantities.

(4) Sampling Data. The plan shall include a summary of existing stormwater discharge sampling data taken at the facility. The summary shall include, at a minimum, any data collected during the previous permit term.

d. Stormwater Controls.

(1) Control measures shall be implemented for all the areas identified in Part III.C.2.c (Summary of Potential Pollutant Sources) to prevent or control pollutants in stormwater discharges from the facility. Regulated stormwater discharges from the facility include stormwater runon that commingles with stormwater discharges associated with industrial activity at the facility. The SWPPP shall describe the type, location and implementation of all control measures for each area where industrial materials or activities are exposed to stormwater. Selection of control measures shall take into consideration:

(a) That preventing stormwater from coming into contact with polluting materials is generally more effective, and less costly, than trying to remove pollutants from stormwater;

(b) Control measures generally shall be used in combination with each other for most effective water quality protection;

(c) Assessing the type and quantity of pollutants, including their potential to impact receiving water quality, is critical to designing effective control measures;

(d) That minimizing impervious areas at the facility can reduce runoff and improve groundwater recharge and stream base flows in local streams (however, care shall be taken to avoid ground water contamination);

(e) Flow attenuation by use of open vegetated swales and natural depressions can reduce in-stream impacts of erosive flows;

(f) Conservation or restoration of riparian buffers will help protect streams from stormwater runoff and improve water quality; and

(g) Treatment interceptors (e.g., swirl separators and sand filters) may be appropriate in some instances to minimize the discharge of pollutants.

(2) Non-numeric technology-based effluent limits. The permittee shall implement the following types of control measures to prevent and control pollutants in the stormwater discharges from the facility, unless it can be demonstrated and documented that such controls are not relevant to the discharges (e.g., there are no storage piles containing salt).

(a) Good Housekeeping. The permittee shall keep clean all exposed areas of the facility that are potential sources of pollutants to stormwater discharges. Typical problem areas include areas around trash containers, storage areas, loading docks, and vehicle fueling and maintenance areas. The plan shall include a schedule for regular pickup and disposal of waste materials, along with routine inspections for leaks and conditions of drums, tanks and containers.

(b) Eliminating and Minimizing Exposure. To the extent practicable, manufacturing, processing and

material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) shall be located inside, or protected by a storm-resistant covering to prevent exposure to rain, snow, snowmelt, and runoff.

(c) Preventive Maintenance. The permittee shall have a preventive maintenance program that includes regular inspection, testing, maintenance and repairing of all industrial equipment and systems to avoid situations that could result in leaks, spills and other releases of pollutants in stormwater discharge from the facility. This program is in addition to the specific control measure maintenance required under Part III.C.2.f (Maintenance).

(d) Spill Prevention and Response Procedures. The plan shall describe the procedures that will be followed for preventing and responding to spills and leaks, including:

(1) Preventive measures, such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling;

(2) Response procedures, including notification of appropriate facility personnel, emergency agencies, and regulatory agencies, and procedures for stopping, containing and cleaning up spills. Measures for cleaning up hazardous material spills or leaks shall be consistent with applicable RCRA regulations at 40 CFR Part 264 and 40 CFR Part 265. Employees who may cause, detect or respond to a spill or leak shall be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals shall be a member of the Pollution Prevention Team;

(3) Procedures for plainly labeling containers (e.g., "used oil," "spent solvents," "fertilizers and pesticides," etc.) that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur; and

(4) Contact information for individuals and agencies that must be notified in the event of a spill shall be included in the SWPPP, and in other locations where it will be readily available.

(e) Salt Storage Piles or Piles Containing Salt. Storage piles of salt or piles containing salt used for deicing or other commercial or industrial purposes shall be enclosed or covered to prevent exposure to precipitation. The permittee shall implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile. All salt storage piles shall be located on an impervious surface. All runoff from the pile, and runoff that comes in contact with salt, including under drain systems, shall be collected and contained within a bermed basin lined with concrete or other impermeable materials, or within an underground storage tank or tanks, or within an above ground storage tank or tanks, or disposed of through a sanitary sewer (with the permission of the owner of the treatment facility). A combination of any or all of these methods may be used. In no case shall salt contaminated stormwater be allowed to discharge directly to the ground or to surface waters.

(f) Employee Training. The permittee shall implement a stormwater employee training program for the facility. The SWPPP shall include a schedule for all types of necessary training, and shall document all training sessions and the employees who received the training. Training shall be provided for all employees who work in areas where industrial materials or activities are exposed to stormwater, and for employees who are responsible for implementing activities identified in the SWPPP (e.g., inspectors, maintenance personnel, etc.). The training shall cover the components and goals of the SWPPP, and include such topics as spill response, good housekeeping, material management practices, control measure operation and maintenance, etc. The SWPPP shall include a summary of any training performed.

(g) Sediment and Erosion Control. The plan shall identify areas at the facility that, due to topography, land disturbance (e.g., construction, landscaping, site grading), or other factors, have a potential for soil erosion. The permittee shall identify and implement structural, vegetative, and stabilization control measures to prevent or control on-site and off-site erosion and sedimentation. Flow velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel if the flows would otherwise create erosive conditions.

(h) Management of Runoff. The plan shall describe the stormwater runoff management practices (i.e., permanent structural control measures) for the facility. These types of control measures are typically used to divert, infiltrate, reuse, or otherwise reduce pollutants in stormwater discharges

from the site.

Structural control measures may require a separate permit under § 404 of the CWA and the Virginia Water Protection Permit Program Regulation (9VAC25-210) before installation begins.

(i) Dust Suppression and Vehicle Tracking of Industrial Materials. The permittee shall implement control measures to minimize the generation of dust and off-site tracking of raw, final, or waste materials. Stormwater collected on-site may be used for the purposes of dust suppression or for spraying stockpiles. Potable water, well water, and uncontaminated reuse water may also be used for this purpose. There shall be no direct discharge to surface waters from dust suppression activities or as a result of spraying stockpiles.

e. Routine Facility Inspections.

Facility personnel who possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility and who can also evaluate the effectiveness of control measures shall regularly inspect all areas of the facility where industrial materials or activities are exposed to stormwater. These inspections are in addition to, or as part of, the comprehensive site evaluation required under Part III.C.2.h. At least one member of the Pollution Prevention Team shall participate in the routine facility inspections.

The inspection frequency shall be specified in the plan based upon a consideration of the level of industrial activity at the facility, but shall be a minimum of quarterly unless more frequent intervals are specified elsewhere in the permit or written approval is received from the Department for less frequent intervals. Inspections shall be performed during periods when the facility is in operation. At least once each calendar year, the routine facility inspection must be conducted during a period when a stormwater discharge is occurring. The requirement for routine facility inspections is waived for facilities that have maintained an active Virginia Environmental Excellence Program (VEEP) E3/E4 status.

Any deficiencies in the implementation of the SWPPP that are found shall be corrected as soon as practicable, but not later than within 30 days of the inspection, unless permission for a later date is granted in writing by the Director. The results of the inspections shall be documented in the SWPPP, and shall include at a minimum:

(1) The inspection date and time;

(2) The name(s) and signature(s) of the inspector(s);

(3) Weather information and a description of any discharges occurring at the time of the inspection;

(4) Any previously unidentified discharges of pollutants from the site;

(5) Any control measures needing maintenance or repairs;

(6) Any failed control measures that need replacement;

(7) Any incidents of noncompliance observed; and

(8) Any additional control measures needed to comply with the permit requirements.

f. Maintenance.

The SWPPP shall include a description of procedures and a regular schedule for preventive maintenance of all control measures, and shall include a description of the back-up practices that are in place should a runoff event occur while a control measure is off-line. The effectiveness of nonstructural control measures shall also be maintained by appropriate means (e.g., spill response supplies available and personnel trained, etc.).

All control measures identified in the SWPPP shall be maintained in effective operating condition and shall be observed at least annually during active operation (i.e., during a stormwater runoff event) to ensure that they are functioning correctly. Where discharge locations are inaccessible, nearby downstream locations shall be observed. The observations shall be documented in the SWPPP.

If site inspections required by Part III.C.2.e (Routine Facility Inspections) or Part III.C.2.h (Comprehensive Site Compliance Evaluation) identify control measures that are not operating effectively, repairs or maintenance shall be performed before the next anticipated storm event. If maintenance prior to the next anticipated storm event is not possible, maintenance shall be scheduled and accomplished as soon as practicable. In the interim, back-up measures shall be employed and documented in the SWPPP until repairs or maintenance is complete. Documentation shall be kept with the SWPPP of maintenance and repairs of control measures, including the date(s) of regular maintenance, date(s) of discovery of areas in need of repair or replacement, date(s) for repairs, date(s) that the control measure(s) returned to full function, and the justification for any extended maintenance or repair schedules.

g. Non-Stormwater Discharges.

(1) Annual outfall evaluation for unauthorized discharges.

(a) The SWPPP shall include documentation that all stormwater outfalls associated with industrial activity have been evaluated annually for the presence of unauthorized discharges (i.e., discharges other than stormwater; the authorized non-stormwater discharges described Part I.A and Part III.A.6; or discharges covered under a separate VPDES permit, other than this permit). The documentation shall include:

(1) The date of the evaluation;
(2) A description of the evaluation criteria used;
(3) A list of the outfalls or on-site drainage points that were directly observed during the evaluation;
(4) A description of the results of the evaluation for the presence of unauthorized discharges; and
(5) The actions taken to eliminate unauthorized discharges if any were identified (i.e., a floor drain was sealed, a sink drain was rerouted to sanitary, or a VPDES permit application was submitted for a cooling water discharge).

(b) The permittee may request in writing to the department that the facility be allowed to conduct annual outfall evaluations at 20% of the outfalls. If approved, the permittee shall evaluate at least 20% of the facility outfalls each year on a rotating basis such that all facility outfalls will be evaluated during the period of coverage under this permit.

h. Comprehensive Site Compliance Evaluation.

The permittee shall conduct comprehensive site compliance evaluations at least once each calendar year after coverage under the permit begins. The evaluations shall be done by qualified personnel who possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility, and who can also evaluate the effectiveness of control measures. The personnel conducting the evaluations may be either facility employees or outside personnel hired by the facility.

(1) Scope of the compliance evaluation. Evaluations shall include all areas where industrial materials or activities are exposed to stormwater, as identified in Part III.C.2.c (Summary of Potential Pollutant Sources). The personnel shall evaluate:

(a) Industrial materials, residue or trash that may have or could come into contact with stormwater;

(b) Leaks or spills from industrial equipment, drums, barrels, tanks or other containers that have occurred within the past three years;

(c) Off-site tracking of industrial or waste materials or sediment where vehicles enter or exit the site;

(d) Tracking or blowing of raw, final, or waste materials from areas of no exposure to exposed areas;

(e) Evidence of, or the potential for, pollutants entering the drainage system;

(f) Evidence of pollutants discharging to surface waters at all facility outfalls, and the condition of and around the outfall, including flow dissipation measures to prevent scouring;

(g) Review of stormwater related training performed, inspections completed, maintenance performed, quarterly visual examinations, and effective operation of control measures, including BMPs;

(h) A summary of the annual outfall evaluation for unauthorized discharges required by Part III.C.2.g.1 (Non-Stormwater Discharges – Annual Outfall Evaluation for Unauthorized Discharges) of this section; and

(i) Results of both visual and any analytical monitoring done during the past year shall be taken into consideration during the evaluation.

(2) Based on the results of the evaluation, the SWPPP shall be modified as necessary (e.g., show additional controls on the map required by Part III.C.2.b.3 (Site Map); revise the description of controls required by Part III.C.2.d (Stormwater Controls) to include additional or modified control measures designed to correct problems identified). Revisions to the SWPPP shall be completed within 30 days following the evaluation, unless permission for a later date is granted in writing by the director. If existing control measures need to be modified or if additional control measures are necessary, implementation shall be completed before the next anticipated storm event, if practicable, but not more than 60 days after completion of the comprehensive site evaluation, unless permission for a later date is granted in writing by the department.

(3) Compliance evaluation report. A report shall be written summarizing the scope of the evaluation, name(s) of personnel making the evaluation, the date of the evaluation, and all observations relating to the implementation of the SWPPP, including elements stipulated in Part III.C.2.h.1 (a) through (i) above (Comprehensive Site Compliance Evaluation – Scope of Compliance Evaluation). Observations shall include such things as: the location(s) of discharges of pollutants from the site; location(s) of previously unidentified sources of pollutants; location(s) of control measures that need to be maintained or repaired; location(s) of failed control measures that need replacement; and location(s) where additional control measures are needed. The report shall identify any incidents of noncompliance that were observed. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the SWPPP and this permit. The report shall be signed in accordance with Part II.K (Signatory Authority) and maintained with the SWPPP.

(4) Where compliance evaluation schedules overlap with routine inspections required under Part III.C.2.e (Routine Facility Inspections) the annual compliance evaluation may be used as one of the routine inspections.

i. Signature and Plan Review.

(1) Signature and Location. The SWPPP, including revisions to the SWPPP to document any corrective actions taken as required by Part III.A.9 (Stormwater Management Conditions – Corrective Actions) shall be signed in accordance with Part II.K (Signatory Authority), dated, and retained on-site at the facility covered by this permit in accordance with Part III.A9 Stormwater Management Conditions – Corrective Actions). All other changes to the SWPPP, and other permit compliance documentation, shall be signed and dated by the person preparing the change or documentation. For inactive facilities, the plan may be kept at the nearest office of the permittee.

(2) Availability. The permittee shall retain a copy of the current SWPPP required by this permit at the facility, and it shall be immediately available to the department, EPA, or the operator of an MS4 receiving discharges from the site at the time of an on-site inspection or upon request.

(3) Required Modifications. The permittee shall modify the SWPPP whenever necessary to address all corrective actions required by Part III.A.9 (Stormwater Management Conditions- Corrective Actions). Changes to the SWPPP shall be made in accordance with the corrective action deadlines in Part III.A.9, and shall be signed and dated in accordance with Part II.K (Signatory Authority).

The director may notify the permittee at any time that the SWPPP, control measures, or other components of the facility's stormwater program do not meet one or more of the requirements of this permit. The notification shall identify specific provisions of the permit that are not being met, and may include required modifications to the stormwater program, additional monitoring requirements, and special reporting requirements. The permittee shall make any required changes to the SWPPP within 60 days of receipt of such notification, unless permission for a later date is granted in writing by the director, and shall submit a written certification to the director that the requested changes have been made.

j. Maintaining an Updated SWPPP.

(1) The permittee shall review and amend the SWPPP as appropriate whenever:

(a) There is construction or a change in design, operation, or maintenance at the facility that has a significant effect on the discharge, or the potential for the discharge, of pollutants from the facility;

(b) Routine inspections or compliance evaluations determine that there are deficiencies in the control measures, including BMPs;

(c) Inspections by local, state, or federal officials determine that modifications to the SWPPP are necessary;

(d) There is a spill, leak or other release at the facility;

(e) There is an unauthorized discharge from the facility; or

(f) The department notifies the permittee that a TMDL has been developed and applies to the permitted facility, consistent with Part I.A.

(2) SWPPP modifications shall be made within 30 calendar days after discovery, observation or event requiring a SWPPP modification. Implementation of new or modified control measures (distinct from regular preventive maintenance of existing control measures described in Part III.C.2.d) shall be initiated before the next storm event if possible, but no later than 60 days after discovery, or as otherwise provided or approved by the director. The amount of time taken to modify a control measure or implement additional control measures shall be documented in the SWPPP.

(3) If the SWPPP modification is based on a release or unauthorized discharge, include a description and date of the release, the circumstances leading to the release, actions taken in response to the release, and measures to prevent the recurrence of such releases. Unauthorized releases and discharges are subject to the reporting requirements of Part II.G (Reports of Unauthorized Discharges) of this permit.

D. Sector Specific Requirements – Stormwater Pollution Prevention Plan

In addition to the requirements of Part III.C, the SWPPP shall include, at a minimum, the following items.

1. Sector A (Outfall 017)

a. Site description.

(1) Site map. The site map shall identify where any of the following may be exposed to precipitation or surface runoff: processing areas; treatment chemical storage areas; treated wood and residue storage areas; wet decking areas; dry decking areas; untreated wood and residue storage areas; and treatment equipment storage areas.

(2) Summary of potential pollutant sources. Where information is available, facilities that have used chlorophenolic, creosote, or chromium-copper-arsenic formulations for wood surface protection or wood preserving activities on-site in the past shall identify in the inventory the following: areas where contaminated soils, treatment equipment, and stored materials still remain, and the management practices employed to minimize the contact of these materials with stormwater runoff.

b. Stormwater controls.
The description of stormwater management controls shall address the following areas of the site: log, lumber and wood product storage areas; residue storage areas; loading and unloading areas; material handling areas; chemical storage areas; and equipment and vehicle maintenance, storage and repair areas. Facilities that surface protect or preserve wood products shall address specific control measures, including any BMPs, for wood surface protection and preserving activities. Facilities that dye mulch shall address specific control measures to prevent the discharge of wet dye drippings and to prevent seepage of pollutants to groundwater. The SWPPP shall address the following minimum components:

(1) Good housekeeping. Good housekeeping measures in storage areas, loading and unloading areas, and material handling areas shall be designed to:
(a) Limit the discharge of wood debris;
(b) Minimize the leachate generated from decaying wood materials; and
(c) Minimize the generation of dust.

(2) Routine facility inspections. Inspections at processing areas, transport areas, and treated wood storage areas of facilities performing wood surface protection and preservation activities shall be performed monthly to assess the usefulness of practices in minimizing the deposit of treatment chemicals on unprotected soils and in areas that will come in contact with stormwater discharges. The requirement for routine facility inspections is waived for facilities that have maintained an active VEEP E3/E4 status.

2. Sector L (Outfall 007 and Outfall 025)

a. Site description.

(1) Site map. The site map shall identify where any of the following may be exposed to precipitation or surface runoff: active and closed landfill cells or trenches; active and closed land application areas; locations where open dumping is occurring or has occurred; locations of any known leachate springs or other areas where uncontrolled leachate may commingle with runoff; and leachate collection and handling systems.

(2) Summary of potential pollutant sources. The SWPPP shall also include a description of potential pollutant sources associated with any of the following: fertilizer, herbicide, and pesticide application; earth and soil moving; waste hauling and loading and unloading; outdoor storage of significant materials including daily, interim and final cover material stockpiles as well as temporary waste storage areas; exposure of active and inactive landfill and land application areas; uncontrolled leachate flows; and failure or leaks from leachate collection and treatment systems.

b. Stormwater controls.

(1) Preventive maintenance program. As part of the preventive maintenance program, the permittee shall maintain: all elements of leachate collection and treatment systems to prevent commingling of leachate with stormwater and the integrity and effectiveness of any intermediate or final cover (including making repairs to the cover as necessary), to minimize the effects of settlement, sinking, and erosion.

(2) Routine facility inspections.

(a) Inspections of active sites. Operating landfills, open dumps, and land application sites shall be inspected at least once every seven days. Qualified personnel shall inspect areas of landfills that have not yet been finally stabilized, active land application areas, areas used for storage of materials or wastes that are exposed to precipitation, stabilization and structural control measures, leachate collection and treatment systems, and locations where equipment and waste trucks enter and exit the site. Erosion and sediment control measures shall be observed to ensure they are operating correctly. For stabilized sites and areas where land application has been completed, or where the climate is seasonally arid (annual rainfall averages from 0 to 10 inches) or semi-arid (annual rainfall averages from 10 to 20 inches), inspections shall be conducted at least once every month.

(b) Inspections of inactive sites. Inactive landfills, open dumps, and land application sites shall be inspected at least quarterly. Qualified personnel shall inspect landfill (or open dump) stabilization and structural erosion control measures and leachate collection and treatment systems, and all closed land application areas.

(3) Recordkeeping and internal reporting procedures. Landfill and open dump owners shall provide for a tracking system for the types of wastes disposed of in each cell or trench of a landfill or open dump. Land application site owners shall track the types and quantities of wastes applied in specific areas.

(4) Annual outfall evaluation for unauthorized discharges. The evaluation shall also be conducted for the presence of leachate and vehicle washwater.

(5) Sediment and erosion control plan. Landfill and open dump owners shall provide for temporary stabilization of materials stockpiled for daily, intermediate, and final cover. Stabilization practices to consider include, but are not limited to, temporary seeding, mulching, and placing geotextiles on the inactive portions of the stockpiles. Landfill and open dump owners shall provide for temporary stabilization of inactive areas of the landfill or open dump which have an intermediate cover but no final cover. Landfill and open dump owners shall provide for temporary stabilization of any landfill or open dumping areas which have received a final cover until vegetation has established itself. Land application site owners shall also stabilize areas where waste application has been completed until vegetation has been established.

(6) Comprehensive site compliance evaluation. Areas contributing to a stormwater discharge associated with industrial activities at landfills, open dumps and land application sites shall be evaluated for evidence of, or the potential for, pollutants entering the drainage system.

3. Sector P (Outfall 006, Outfall 010, Outfall 011, Outfall 015, Outfall 032, and Outfall 033)

a. Site description. Site map. The site map shall identify the locations of any of the following activities and indicate whether the activities may be exposed to precipitation or surface runoff: fueling stations; vehicle and equipment maintenance or cleaning areas; storage areas for vehicle and equipment with actual or potential fluid leaks; loading and unloading areas; areas where treatment, storage or disposal of wastes occur; liquid storage tanks; processing areas; and storage areas.

b. Summary of potential pollutant sources. The plan shall describe and assess the potential for the following to contribute pollutants to stormwater discharges: on-site waste storage or disposal; dirt or gravel parking areas for vehicles awaiting maintenance; plumbing connections between shop floor drains and the stormwater conveyance system; and fueling areas.

c. Stormwater controls.
   (1) Good housekeeping.
      (a) Vehicle and equipment storage areas. The storage of vehicles and equipment awaiting maintenance with actual or potential fluid leaks shall be confined to designated areas (delineated on the site map). The permittee shall consider the following measures (or their equivalents): the use of drip pans under vehicles and equipment; indoor storage of vehicles and equipment; installation of berms or dikes; use of absorbents; roofing or covering storage areas; and cleaning pavement surface to remove oil and grease.

      (b) Fueling areas. The permittee shall describe and implement measures that prevent or minimize contamination of the stormwater runoff from fueling areas. The permittee shall consider the following measures (or their equivalents): covering the fueling area; using spill and overflow protection and cleanup equipment; minimizing stormwater runon and runoff to the fueling area; using dry cleanup methods; and treating or recycling collected stormwater runoff.

      (c) Material storage areas. Storage vessels of all materials (e.g., for used oil or oil filters, spent solvents, paint wastes, hydraulic fluids) shall be maintained in good condition, so as to prevent contamination of stormwater, and plainly labeled (e.g., "used oil," "spent solvents," etc.). The permittee shall consider the following measures (or their equivalents): indoor storage of the materials; installation of berms and dikes around the areas, minimizing runoff of stormwater to the areas; using dry cleanup methods; and treating or recycling the collected stormwater runoff.

      (d) Vehicle and equipment cleaning areas. The permittee shall describe and implement measures that prevent or minimize contamination of stormwater runoff from all areas used for vehicle and equipment cleaning. The permittee shall consider the following measures (or their equivalents): performing all cleaning operations indoors; covering the cleaning operation; ensuring that all washwaters drain to a proper collection system (i.e., not the stormwater drainage system unless VPDES permitted); and treating or recycling the collected stormwater runoff.

      (e) Vehicle and equipment maintenance areas. The permittee shall describe and implement measures that prevent or minimize contamination of the stormwater runoff from all areas used for vehicle and equipment maintenance. The permittee shall consider the following measures (or their equivalents): performing maintenance activities indoors; using drip pans; keeping an organized inventory of materials used in the shop; draining all parts of fluids prior to disposal; prohibiting wet clean up practices where the practices would result in the discharge of pollutants to stormwater drainage systems; using dry cleanup methods; treating or recycling collected stormwater runoff; and minimizing runon and runoff of stormwater to maintenance areas.

      (f) Locomotive sanding (loading sand for traction) areas. The plan shall describe measures that prevent or minimize contamination of the stormwater runoff from areas used for locomotive sanding. The permittee shall consider the following measures (or their equivalents): covering sanding areas; minimizing stormwater runon and runoff; or appropriate sediment removal practices to minimize the off-site transport of sanding material by stormwater.

d. Routine facility inspections. The following areas and activities shall be included in all inspections: storage area for vehicles and equipment awaiting maintenance; fueling areas; indoor and outdoor vehicle and equipment maintenance areas; material storage areas; vehicle and equipment cleaning areas; and loading and unloading areas.

e. Employee training. Employee training shall take place, at a minimum, annually (once per calendar year). Employee training shall address the following as applicable: used oil and spent solvent management; fueling procedures; general good housekeeping practices; proper painting procedures; and used battery management.

4. Sector Q (Outfall 016 and Outfall 022)

a. Site description.

(1) Site map. The site map shall identify the locations where any of the following activities may be exposed to precipitation or surface runoff: fueling; engine maintenance or repair; vessel maintenance or repair; pressure washing; painting; sanding; blasting; welding; metal fabrication; loading and unloading areas; locations used for the treatment, storage or disposal of wastes; liquid storage tanks; liquid storage areas (e.g., paint, solvents, resins); and material storage areas (e.g., blasting media, aluminum, steel, scrap iron).

(2) Summary of potential pollutant sources. The plan shall describe the following additional sources and activities that have potential pollutants associated with them: outdoor manufacturing or processing activities (i.e., welding, metal fabricating); and significant dust or particulate generating processes (e.g., abrasive blasting, sanding, painting).

b. Stormwater controls.

(1) Good housekeeping.

(a) Pressure washing area. As defined by this permit, process wastewater related to hull work at water transportation facilities shall be any water used on a vessel's hull for any purpose, regardless of application pressure, including but not limited to the activities of removing marine salts, sediments, marine growth and paint, or other hull, weather deck, or superstructure cleaning activities using water, such as preparing those areas for inspection or work (cutting, welding, grinding, coating, etc.). The discharge water shall be permitted as a process wastewater by a separate VPDES permit.

(b) Blasting and painting areas. The permittee shall describe and implement measures to prevent spent abrasives, paint chips, and overspray from discharging into the receiving water or the storm sewer system. The permittee may consider containing all blasting or painting activities, or the use of other measures to prevent or minimize the discharge of contaminants (e.g., hanging plastic barriers or tarpaulins during blasting or painting operations to contain debris). Stormwater conveyances shall be regularly cleaned to remove deposits of abrasive blasting debris and paint chips. The plan shall include any standard operating practices with regard to blasting and painting activities, such as the prohibition of uncontained blasting or painting over open water, or the prohibition of blasting or painting during windy conditions which can render containment ineffective.

(c) Material storage areas. All containerized materials (e.g., fuels, paints, solvents, waste oil, antifreeze, batteries) shall be plainly labeled and stored in a protected, secure location away from drains. The permittee shall describe and implement measures to prevent or minimize the contamination of precipitation or surface runoff from the storage areas. The plan shall specify which materials are stored indoors and consider containment or enclosure for materials that are stored outdoors. The permittee shall consider implementing an inventory control plan to limit the presence of potentially hazardous materials on-site. Where abrasive blasting is performed, the plan shall specifically include a discussion on the storage and disposal of spent abrasive materials generated at the facility.

(d) Engine maintenance and repair areas. The permittee shall describe and implement measures to prevent or minimize contamination of precipitation or surface runoff from all areas used for engine maintenance and repair. The permittee shall consider the following measures (or their equivalent): performing all maintenance activities indoors; maintaining an organized inventory of materials used in the shop; draining all parts of fluids prior to disposal; prohibiting the practice of hosing down the shop floor using dry cleanup methods; and treating or recycling stormwater runoff collected from the maintenance area.

(e) Material handling areas. The permittee shall describe and implement measures to prevent or minimize contamination of precipitation or surface runoff from material handling operations and areas (e.g., fueling, paint and solvent mixing, disposal of process wastewater streams from vessels). The permittee shall consider the following measures (or their equivalents): covering fueling areas; using spill and overflow protection; mixing paints and solvents in a designated area (preferably indoors or under a shed); and minimizing runon of stormwater to material handling areas.

(f) Drydock activities. The plan shall address the routine maintenance and cleaning of the drydock to minimize the potential for pollutants in the stormwater runoff. The plan shall describe the procedures for cleaning the accessible areas of the drydock prior to flooding and final cleanup after the vessel is removed and the dock is raised. Cleanup procedures for oil, grease, or fuel spills occurring on the drydock shall also be included within the plan. The permittee shall consider the following measures (or their equivalents): sweeping rather than hosing off debris and spent blasting material from the accessible areas of the drydock prior to flooding; and having absorbent materials and oil containment booms readily available to contain or cleanup any spills.

(g) General yard area. The plan shall include a schedule for routine yard maintenance and cleanup. Scrap metal, wood, plastic, miscellaneous trash, paper, glass, industrial scrap, insulation, welding rods, packaging, etc., shall be routinely removed from the general yard area.

(2) Preventative Maintenance. As part of the facility's preventive maintenance program, stormwater management devices shall be inspected and maintained in a timely manner (e.g., oil/water separators and sediment traps cleaned to ensure that spent abrasives, paint chips and solids are intercepted and retained prior to entering the storm drainage system). Facility equipment and systems shall also be inspected and tested to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters.

(3) Routine facility inspections. The following areas shall be included in all quarterly inspections: pressure washing area; blasting, sanding, and painting areas; material storage areas; engine maintenance and repair areas; material handling areas; drydock area; and general yard area. The requirement for routine facility inspections is waived for facilities that have maintained an active VEEP E3/E4 status.

(4) Employee training. Training shall address, at a minimum, the following activities (as applicable): used oil management; spent solvent management; disposal of spent abrasives; disposal of vessel wastewaters; spill prevention and control; fueling procedures; general good housekeeping practices; painting and blasting procedures; and used battery management.

5. Sector S (Outfall 001, Outfall 002, and Outfall 003)

a. Site description.

(1) Site map. The site map shall identify the location of the following activities and indicate any of the activities that may be exposed to precipitation or surface runoff: aircraft and runway deicing or anti-icing operations; fueling stations; aircraft, ground vehicle and equipment maintenance and cleaning areas; and storage areas for aircraft, ground vehicles and equipment awaiting maintenance.

(2) Summary of potential pollutant sources. The plan shall include a narrative description of the potential pollutant sources from the following activities: aircraft, runway, ground vehicle and equipment maintenance and cleaning; aircraft and runway deicing or anti-icing operations (including apron and centralized aircraft deicing or anti-icing stations, runways, taxiways, and ramps). Facilities which conduct deicing or anti-icing operations shall maintain a record of the types (including the safety data sheets (SDS)) and monthly quantities of deicing or anti-icing chemicals used, either as measured amounts, or in the absence of metering, as estimated amounts. This includes all deicing or anti-icing chemicals, not just glycols and urea (e.g., potassium acetate). Tenants and fixed-base operators who conduct deicing or anti-icing operations shall provide the above information to the airport authority for inclusion in the stormwater pollution prevention plan for the entire facility.

(3) Deicing season. The SWPPP shall define the average seasonal timeframe (e.g., December-February, October-March, etc.) during which deicing activities typically occur at the facility. Implementation of control measures, including any BMPs, facility inspections, and effluent limitation monitoring shall be conducted with particular emphasis throughout the defined deicing season.

b. Stormwater controls.

(1) Good housekeeping.

(a) Aircraft, ground vehicle and equipment maintenance areas. The permittee shall describe and implement measures that prevent or minimize the contamination of stormwater runoff from all areas used for aircraft, ground vehicle and equipment maintenance (including the maintenance conducted on the terminal apron and in dedicated hangars). Appropriate control measures (or their equivalents) shall be implemented, such as the following practices: performing maintenance activities indoors; maintaining an organized inventory of materials used in the maintenance areas; draining all parts of fluids prior to disposal; preventing the practice of hosing down the apron or hangar floor; using dry cleanup methods; and collecting the stormwater runoff from the maintenance area and providing treatment or recycling.

(b) Aircraft, ground vehicle and equipment cleaning areas. Permittees shall ensure that cleaning of equipment is conducted in designated areas only and clearly identify these areas on the ground and delineate them on the site map. The permittee shall describe and implement measures that prevent or minimize the contamination of the stormwater runoff from cleaning areas.

(c) Aircraft, ground vehicle and equipment storage areas. The storage of aircraft, ground vehicles and equipment awaiting maintenance shall be confined to designated areas (delineated on the site map). Appropriate control measures, including any BMPs (or their equivalents) shall be implemented, such as the following practices: indoor storage of aircraft and ground vehicles; the use of drip pans for the collection of fluid leaks; and perimeter drains, dikes or berms surrounding storage areas.

(d) Material storage areas. Storage vessels of all materials (e.g., used oils, hydraulic fluids, spent solvents, and waste aircraft fuel) shall be maintained in good condition, so as to prevent or minimize contamination of stormwater, and plainly labeled (e.g., "used oil," "Contaminated Jet A," etc.). The permittee shall describe and implement measures that prevent or minimize contamination of precipitation or runoff from storage areas. Appropriate control measures (or their equivalents) shall be implemented, such as the following practices: indoor storage of materials; centralized storage areas for waste materials; and installation of berms and dikes around storage areas.

(e) Airport fuel system and fueling areas. The permittee shall describe and implement measures that prevent or minimize the discharge of fuels to the storm sewer or surface waters resulting from fuel servicing activities or other operations conducted in support of the airport fuel system. Appropriate control measures (or their equivalents) shall be implemented, such as the following practices: implementing spill and overflow practices (e.g., placing absorptive materials beneath aircraft during fueling operations); using dry cleanup methods; and collecting the stormwater runoff.

(2) Source reduction. The permittee shall minimize, and where practicable eliminate, the use of urea and glycol-based deicing or anti-icing chemicals in order to reduce the aggregate amount of deicing or anti-icing chemicals used and lessen the environmental impact. Chemical options to replace ethylene glycol, propylene glycol and urea include: potassium acetate; magnesium acetate; calcium acetate; anhydrous sodium acetate.

(a) Runway deicing operations. The permittee shall minimize contamination of stormwater runoff from runways as a result of deicing operations. The permittee shall evaluate present application rates to ensure against excessive over application by analyzing application rates and adjusting as necessary, consistent with considerations of flight safety. Appropriate control measures, (or their equivalents) shall be implemented, such as the following practices: metered application of chemicals; prewetting dry chemical constituents prior to application; installation of runway ice detection systems; implementing anti-icing operations as a preventive measure against ice buildup.

(b) Aircraft deicing operations. The permittee shall minimize contamination of stormwater runoff from aircraft deicing operations. The permittee shall determine whether excessive application of deicing chemicals occurs, and adjust as necessary, consistent with considerations of flight safety. This evaluation shall be carried out by the personnel most familiar with the particular aircraft and flight operations in question (versus an outside entity such as the airport authority). The use of alternative deicing or anti-icing agents as well as containment measures for all applied chemicals shall be considered. Appropriate control measures (or their equivalents) shall be implemented for reducing deicing fluid use, such as the following practices: forced-air deicing systems; computer-controlled fixed-gantry systems; infrared technology; hot water; varying glycol content to air temperature; enclosed-basket deicing trucks; mechanical methods; solar radiation; hangar storage; aircraft covers; and thermal blankets for MD-80s and DC-9s. The use of ice-detection systems and airport traffic flow strategies and departure slot allocation systems shall also be considered where practicable.

(3) Management of runoff. Where deicing operations occur, the permittee shall implement a program to control or manage contaminated runoff to minimize the amount of pollutants being discharged from the site. The plan shall describe the controls used for collecting or containing contaminated melt water from collection areas used for disposal of contaminated snow. The following control measure options (or their equivalents) shall be considered: establishing a dedicated deicing facility with a runoff collection and recovery system; using vacuum or collection trucks; storing contaminated stormwater water or deicing fluids in tanks and releasing controlled amounts to a publicly owned treatment works; collecting contaminated runoff in a wet pond for biochemical decomposition (be aware of attracting wildlife that may prove hazardous to flight operations); and directing runoff into vegetative swales or other infiltration measures. The plan shall consider the recovery of deicing and anti-icing materials when these materials are applied during nonprecipitation events (e.g., covering storm sewer inlets, using booms, installing absorptive interceptors in the drains, etc.) to prevent these materials from later becoming a source of stormwater contamination. Used deicing fluid shall be recycled whenever possible.

(4) Routine facility inspections. The inspection frequency shall be specified in the plan. At a minimum, inspections shall be conducted once per month during deicing and anti-icing season (e.g., October through April for most airports). If deicing occurs before or after this period, the inspections shall be expanded to include all months during which deicing chemicals may be used.

(5) Comprehensive site compliance evaluation. The annual site compliance evaluations shall be conducted by qualified facility personnel during periods of actual deicing operations, if possible. If not practicable during active deicing or if the weather is too inclement, the evaluations shall be conducted when deicing operations are likely to occur and the materials and equipment for deicing are in place.

6. Sector AA (Outfall 018)

a. Site description.

(1) Site map. The site map shall identify where any of the following may be exposed to precipitation or surface runoff: raw metal storage areas; finished metal storage areas; scrap disposal collection sites; equipment storage areas; retention and detention basins; temporary or permanent diversion dikes or berms; right-of-way or perimeter diversion devices; sediment traps or barriers; processing areas including outside painting areas; wood preparation; recycling; and raw material storage.

(2) Spills and Leaks. When listing significant spills and leaks, the permittee shall pay attention to the following materials, at a minimum: chromium, toluene, pickle liquor, sulfuric acid, zinc and other water priority chemicals and hazardous chemicals and wastes.

(3) Summary of potential pollutant sources. The plan shall include a description of the potential pollutant sources from the following activities: loading and unloading operations for paints, chemicals and raw materials; outdoor storage activities for raw materials, paints, empty containers, corn cob, chemicals, scrap metals; outdoor manufacturing or processing activities such as grinding, cutting, degreasing, buffing, brazing, etc.; and on-site waste disposal practices for spent solvents, sludge, pickling baths, shavings, ingots pieces, refuse and waste piles.

b. Stormwater controls.

(1) Good housekeeping.

(a) Raw steel handling storage. The permittee shall describe and implement measures for managing or recovering scrap metals, fines, and iron dust, including measures for containing materials within storage handling areas.

(b) Paints and painting equipment. The permittee shall describe and implement measures to prevent or minimize exposure of paint and painting equipment from exposure to stormwater.

(2) Spill prevention and response procedures. The permittee shall ensure that the necessary equipment to implement a cleanup is available to personnel. The following areas shall be addressed:

(a) Metal fabricating areas. The permittee shall describe and implement measures for maintaining clean, dry, orderly conditions in these areas. Use of dry clean-up techniques shall be considered in the plan.

(b) Storage areas for raw metal. The permittee shall describe and implement measures to keep these areas free of conditions that could cause, or impede appropriate timely response to, spills or leakage of materials. The following measures (or their equivalents) shall be considered: storage areas maintained such that there is easy access in the event of a spill; stored materials labeled to aid in identifying spill contents.

(c) Metal working fluid storage areas. The permittee shall describe and implement measures for storage of metal working fluids.

(d) Cleaners and rinse water. The permittee shall describe and implement measures to control and clean up spills of solvents and other liquid cleaners; control sand buildup and disbursement from sand-blasting operations; and prevent exposure of recyclable wastes. Environmentally benign cleaners shall be substituted when possible.

(e) Lubricating oil and hydraulic fluid operations. The permittee shall describe and implement measures to minimize the potential for stormwater contamination from lubricating oil and hydraulic fluid operations. The permittee shall consider using devices or monitoring equipment or other devices to detect and control leaks and overflows. The installation of perimeter controls such as dikes, curbs, grass filter strips, or other equivalent measures shall also be considered.

(f) Chemical storage areas. The permittee shall describe and implement proper storage methods that prevent stormwater contamination and accidental spillage. The plan shall include a program to inspect containers, and identify proper disposal methods.

(3) Inspections. Metal fabricators shall at a minimum include the following areas for inspection: raw metal storage areas; finished product storage areas; material and chemical storage areas; recycling areas; loading and unloading areas; equipment storage areas; paint areas; and vehicle fueling and maintenance areas.

(4) Comprehensive site compliance evaluation. The site compliance evaluation shall also include inspections of: areas associated with the storage of raw metals; storage of spent solvents and chemicals; outdoor paint areas; and roof drainage. Potential pollutants include chromium, zinc, lubricating oil, solvents, aluminum, oil and grease, methyl ethyl ketone, steel and other related materials.

ATTACHMENT A – Solid Waste Management Unit (SWMU) – ID#_____
DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY CRITERIA MONITORING

Effective January 1, 2012, all analyses shall be in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

A listing of Virginia Environmental Laboratory Accreditation Program (VELAP) certified and/or accredited laboratories can be found at the following website:
http://www.dgs.state.va.us/DivisionofConsolidatedLaboratoryServices/Services/EnvironmentalLaboratoryCertification/tabid/1059/Default.aspx

Please be advised that additional water quality analyses may be necessary and/or required for permitting purposes.

CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY
METALS						
7440-36-0	Antimony, dissolved	(3)	0.2		G or C	1/5 YR
7440-38-2	Arsenic, dissolved	(3)	1.0		G or C	1/5 YR
7440-43-9	Cadmium, dissolved	(3)	0.3		G or C	1/5 YR
16065-83-1	Chromium III, dissolved [6]	(3)	0.5		G or C	1/5 YR
18540-29-9	Chromium VI, dissolved [6]	(3)	0.5		G or C	1/5 YR
7440-50-8	Copper, dissolved	(3)	0.5		G or C	1/5 YR
7439-92-1	Lead, dissolved	(3)	0.5		G or C	1/5 YR
7439-97-6	Mercury, dissolved	(3)	1.0		G or C	1/5 YR
7440-02-0	Nickel, dissolved	(3)	0.5		G or C	1/5 YR
7440-22-4	Silver, dissolved	(3)	0.2		G or C	1/5 YR
7440-28-0	Thallium, dissolved	(3)	(4)		G or C	1/5 YR
7440-66-6	Zinc, dissolved	(3)	2.0		G or C	1/5 YR

CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY
PESTICIDES/PCBs						
309-00-2	Aldrin	608/625	0.05		G or C	1/5 YR
57-74-9	Chlordane	608/625	0.2		G or C	1/5 YR
2921-88-2	Chlorpyrifos (synonym = Dursban)	622	(4)		G or C	1/5 YR
72-54-8	DDD	608/625	0.1		G or C	1/5 YR
72-55-9	DDE	608/625	0.1		G or C	1/5 YR
50-29-3	DDT	608/625	0.1		G or C	1/5 YR
8065-48-3	Demeton (synonym = Dementon-O,S)	622	(4)		G or C	1/5 YR
333-41-5	Diazinon	622	(4)		G or C	1/5 YR
60-57-1	Dieldrin	608/625	0.1		G or C	1/5 YR
959-98-8	Alpha-Endosulfan (synonym = Endosulfan I)	608/625	0.1		G or C	1/5 YR
33213-65-9	Beta-Endosulfan (synonym = Endosulfan II)	608625	0.1		G or C	1/5 YR
1031-07-8	Endosulfan Sulfate	608/625	0.1		G or C	1/5 YR
72-20-8	Endrin	608/625	0.1		G or C	1/5 YR
7421-93-4	Endrin Aldehyde	608/625	(4)		G or C	1/5 YR
86-50-0	Guthion (synonym = Azinphos Methyl)	622	(4)		G or C	1/5 YR
76-44-8	Heptachlor	608/625	0.05		G or C	1/5 YR
1024-57-3	Heptachlor Epoxide	608/625	(4)		G or C	1/5 YR
319-84-6	Hexachlorocyclohexane Alpha-BHC	608/625	(4)		G or C	1/5 YR
319-85-7	Hexachlorocyclohexane Beta-BHC	608/625	(4)		G or C	1/5 YR
58-89-9	Hexachlorocyclohexane Gamma-BHC (syn. = Lindane)	608/625	(4)		G or C	1/5 YR
143-50-0	Kepone	8081 Extended/ 8270C/8270D	(4)		G or C	1/5 YR
121-75-5	Malathion	614	(4)		G or C	1/5 YR
72-43-5	Methoxychlor	608.2	(4)		G or C	1/5 YR
2385-85-5	Mirex	8081 Extended/ 8270C/8270D	(4)		G or C	1/5 YR
56-38-2	Parathion (synonym = Parathion Ethyl)	614	(4)		G or C	1/5 YR
8001-35-2	Toxaphene	608/625	5.0		G or C	1/5 YR

CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY
BASE NEUTRAL EXTRACTABLES						
83-32-9	Acenaphthene	610/625	10.0		G or C	1/5 YR
120-12-7	Anthracene	610/625	10.0		G or C	1/5 YR
92-87-5	Benzidine	625	(4)		G or C	1/5 YR
56-55-3	Benzo (a) anthracene	610/625	10.0		G or C	1/5 YR
205-99-2	Benzo (b) fluoranthene	610/625	10.0		G or C	1/5 YR
207-08-9	Benzo (k) fluoranthene	610/625	10.0		G or C	1/5 YR
50-32-8	Benzo (a) pyrene	610/625	10.0		G or C	1/5 YR
111-44-4	Bis 2-Chloroethyl Ether	625	(4)		G or C	1/5 YR
108-60-1	Bis 2-Chloroisopropyl Ether	625	(4)		G or C	1/5 YR
117-81-7	Bis 2-Ethylhexyl Phthalate (syn. = Di-2-Ethylhexyl Phthalate)	625	10.0		G or C	1/5 YR
85-68-7	Butyl benzyl phthalate	625	10.0		G or C	1/5 YR
91-58-7	2-Chloronaphthalene	625	(4)		G or C	1/5 YR
218-01-9	Chrysene	610/625	10.0		G or C	1/5 YR
53-70-3	Dibenzo (a,h) anthracene	610/625	20.0		G or C	1/5 YR
95-50-1	1,2-Dichlorobenzene	602/624	10.0		G or C	1/5 YR
541-73-1	1,3-Dichlorobenzene	602/624	10.0		G or C	1/5 YR
106-46-7	1,4-Dichlorobenzene	602/624	10.0		G or C	1/5 YR
91-94-1	3,3-Dichlorobenzidine	625	(4)		G or C	1/5 YR
84-66-2	Diethyl phthalate	625	10.0		G or C	1/5 YR
131-11-3	Dimethyl phthalate	625	(4)		G or C	1/5 YR
84-74-2	Di-n-butyl Phthalate (synonym = Dibutyl Phthalate)	625	10.0		G or C	1/5 YR
121-14-2	2,4-Dinitrotoluene	625	10.0		G or C	1/5 YR
122-66-7	1,2-Diphenylhydrazine	625/ 8270C/8270D	(4)		G or C	1/5 YR
206-44-0	Fluoranthene	610/625	10.0		G or C	1/5 YR
86-73-7	Fluorene	610/625	10.0		G or C	1/5 YR
118-74-1	Hexachlorobenzene	625	(4)		G or C	1/5 YR
87-68-3	Hexachlorobutadiene	625	(4)		G or C	1/5 YR
77-47-4	Hexachlorocyclopentadiene	625	(4)		G or C	1/5 YR
67-72-1	Hexachloroethane	625	(4)		G or C	1/5 YR

CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY
193-39-5	Indeno(1,2,3-cd)pyrene	610/625	20.0		G or C	1/5 YR
78-59-1	Isophorone	625	10.0		G or C	1/5 YR
98-95-3	Nitrobenzene	625	10.0		G or C	1/5 YR
62-75-9	N-Nitrosodimethylamine	625	(4)		G or C	1/5 YR
621-64-7	N-Nitrosodi-n-propylamine	625	(4)		G or C	1/5 YR
86-30-6	N-Nitrosodiphenylamine	625	(4)		G or C	1/5 YR
129-00-0	Pyrene	610/625	10.0		G or C	1/5 YR
120-82-1	1,2,4-Trichlorobenzene	625	10.0		G or C	1/5 YR
	VOLATILES					
107-02-8	Acrolein	624	(4)		G	1/5 YR
107-13-1	Acrylonitrile	624	(4)		G	1/5 YR
71-43-2	Benzene	602/624	10.0		G	1/5 YR
75-25-2	Bromoform	624	10.0		G	1/5 YR
56-23-5	Carbon Tetrachloride	624	10.0		G	1/5 YR
108-90-7	Chlorobenzene (synonym = Monochlorobenzene)	602/624	50.0		G	1/5 YR
124-48-1	Chlorodibromomethane	624	10.0		G	1/5 YR
67-66-3	Chloroform	624	10.0		G	1/5 YR
75-27-4	Dichlorobromomethane	624	10.0		G	1/5 YR
107-06-2	1,2-Dichloroethane	624	10.0		G	1/5 YR
75-35-4	1,1-Dichloroethylene	624	10.0		G	1/5 YR
156-60-5	1,2-trans-dichloroethylene	624	(4)		G	1/5 YR
78-87-5	1,2-Dichloropropane	624	(4)		G	1/5 YR
542-75-6	1,3-Dichloropropene	624	(4)		G	1/5 YR
100-41-4	Ethylbenzene	602/624	10.0		G	1/5 YR
74-83-9	Methyl Bromide (synonym = Bromomethane)	624	(4)		G	1/5 YR
75-09-2	Methylene Chloride (synonym = Dichloromethane)	624	20.0		G	1/5 YR
79-34-5	1,1,2,2-Tetrachloroethane	624	(4)		G	1/5 YR
127-18-4	Tetrachloroethylene (synonym = Tetrachloroethene)	624	10.0		G	1/5 YR
10-88-3	Toluene	602/624	10.0		G	1/5 YR
79-00-5	1,1,2-Trichloroethane	624	(4)		G	1/5 YR

CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY
79-01-6	Trichloroethylene (synonym = Trichloroethene)	624	10.0		G	1/5 YR
75-01-4	Vinyl Chloride	624	10.0		G	1/5 YR
ACID EXTRACTABLES						
95-57-8	2-Chlorophenol	625	10.0		G or C	1/5 YR
120-83-2	2,4 Dichlorophenol	625	10.0		G or C	1/5 YR
105-67-9	2,4 Dimethylphenol	625	10.0		G or C	1/5 YR
51-28-5	2,4-Dinitrophenol	625	(4)		G or C	1/5 YR
534-52-1	2-Methyl-4,6-Dinitrophenol	625	(4)		G or C	1/5 YR
25154-52-3	Nonylphenol	ASTM D 7065-06	(4)		G or C	1/5 YR
87-86-5	Pentachlorophenol	625	50.0		G or C	1/5 YR
108-95-2	Phenol	625	10.0		G or C	1/5 YR
88-06-2	2,4,6-Trichlorophenol	625	10.0		G or C	1/5 YR

_____

Name of Principal Executive Officer or Authorized Agent & Title

_____

Signature of Principal Executive Officer or Authorized Agent & Date

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. Sec. 1001 and 33 U.S.C. Sec. 1319. (Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)

FOOTNOTES:

(1) Quantification level (QL) means the minimum levels, concentrations, or quantities of a target variable (e.g. target analyte) that can be reported with a specified degree of confidence in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

The quantification levels indicated for the metals are actually Specific Target Values developed for this permit. The Specific Target Value is the approximate value that may initiate a wasteload allocation analysis. Target values are not wasteload allocations or effluent limitations. The Specific Target Values are subject to change based on additional information such as hardness data, receiving stream flow, and design flows.

Units for the quantification level are micrograms/liter unless otherwise specified.

Quality control and quality assurance information (i.e. laboratory certificates of analysis) shall be submitted to document that the required quantification level has been attained.

(2) Sample Type

G = Grab = An individual sample collected in less than 15 minutes. Substances specified with "grab" sample type shall only be collected as grabs. The permittee may analyze multiple grabs and report the average results provided that the individual grab results are also reported. For grab metals samples, the individual samples shall be filtered and preserved immediately upon collection.

C = Composite = A 24-hour composite unless otherwise specified. The composite shall be a combination of individual samples, taken proportional to flow, obtained at hourly or smaller time intervals. The individual samples may be of equal volume for flows that do not vary by +/- 10 percent over a 24-hour period.

(3) A specific analytical method is not specified; however, an appropriate method to meet the QL shall be selected from any approved method presented in 40 CFR Part 136.

(4) The QL is at the discretion of the permittee. If the test result is less than the method QL, a “<[QL]” shall be reported where the actual analytical test QL is substituted for [QL].

(5) Analytical Methods: Analysis of Butyltins in Environmental Systems by the Virginia Institute of Marine Science, dated November 1996 (currently the only Virginia Environmental Laboratory Accreditation Program (VELAP) accredited method).

(6) Both Chromium III and Chromium VI may be measured by the total chromium analysis. The total chromium analytical test QL shall be less than or equal to the lesser of the Chromium III or Chromium VI method QL listed above. If the result of the total chromium analysis is less than the analytical test QL, both Chromium III and Chromium VI can be reported as “<[QL]”, where the actual analytical test QL is substituted for [QL].